1

On lesson 1 unit 1

1. Choose the correct answer.

a. In the equation:
$$8,100 \div 25 = 324$$
, the quotient is

A. 8,100

B. 25

C. 324

D. zero

b.
$$5,262 \div 57 = 92 R$$

A. 18

B. 57

C. 92

D. 0

A. 234

B. 243

C. 324

D. 423

A. 32,400

B. 765

C. 16

D. 675

A. 154

B. 23

C. 514

D. 6

A. 196 R 0

B. 5R4

C. 196 R 4

D. 196 R 5

2. Which situations in value division?

a. There are 2,880 kilograms of oranges. A worker separates the oranges into boxes of 40 kg. How many boxes will be made?

b. There are 12 bags of fava beans. Each bag has a mass of 3 kilograms. What is the total mass of the fava beans?

c. Fatma feeds her cat $\frac{1}{8}$ of a kilogram of cat food each day. How many days will 4 kg. of cat food last?

d. Manal has $2\frac{1}{2}$ hours to complete her schoolwork. She finishes her math in $\frac{3}{4}$ of an hour. How much time remains for the rest of her schoolwork?

e. Nader has 8 liters of fruit juice. If he drinks $\frac{1}{4}$ L of juice each day, how many days will it take him finish all the juice?

3. A merchans paid 5,160 L.E. to buy 24 boxes of mango. Find the price of each box.

Till lesson 2 unit 1

Complete the following.

- **a.** The L.C.M of 5 and 7 is ______
- **b.** $8,529 \div 25 = 341 \, \text{R}$
- c. The common factor of all numbers is _____
- d. In the opposite venn diagram the G.C.F is _____



e. The divisor in the equation: $16,692 \div 52 = 321$ is ___

Choose the correct answer.

- a. _____ is a multiple of any number.
 - **A**. 3
- B. 2

C. 1

- **D**. 0
- **b.** In the equation: $2,150 \div 25 = 86$, the remainder is
 - A. 0
- B. 25
- C. 86
- **D.** 2,150
- c. Which of the following are relatively prime numbers?
 - A. 4 and 8
- B. 12 and 18
- C. 2 and 12
- D. 9 and 4
- d. In the opposite Venn diagram the L.C.M is _____
 - A. 0
- B. 1

- C. 15
- D. 8



- **e.** $2,574 \div 7 =$
 - **A.** 376 R 5 **B.** 367 R 5
- C. 367
- D. 376
- 3. Find G.C.F and L.C.M of 12 and 18 by two methods.
- A factory produces 875 pieces of cloth weekly. How many pieces did the factory produce daily?

Till lesson 3 unit 1

-6	Cl	41		
	Choose	tne	correct	answer.

A.
$$2(0+5)$$
 B. $5(5+2)$

B.
$$5(5+2)$$

C.
$$5(4+5)$$

D.
$$20(0+5)$$

B. 98

A.
$$10(6+35)$$

B.
$$3(10+7)$$

C.
$$7(10+3)$$

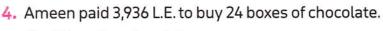
D.
$$10(3+7)$$



Complete the following.

b.
$$5 \times 3 + 5 \times 7 = 5$$
 (+ - -)

3. Lara has 24 pens and 16 rules. She wants to put them in groups. What is the greatest number of groups that can be made so that each group has the same number of items? How many pens will be in each group? How many rules will be in each group? and write the expression which represents the total number of items.



Find the price of each box.



Till lesson 4 unit 1

1. Complete the following.

- a. The L.C.M of 5 and 10 is
- **b.** $5-2\frac{1}{3}=$
- c. Youssef works 210 hours monthly, then he works _____ hours daily.
- d. $4\frac{1}{7} + 2\frac{1}{2} = -$
- e. 60 + 90 = 30 (-----+
- f. $2\frac{1}{5} 1\frac{1}{2} = -$

Choose the correct answer.

- a. $\frac{2}{7} + \frac{1}{7} + \frac{5}{7} + \frac{3}{7} =$

 - A. $\frac{11}{28}$ B. $1\frac{4}{7}$
- C. $\frac{11}{14}$
- **D.** $\frac{10}{7}$

- A. 24 + 13
- **B.** 3(8+5)
- C. 24 + 40
- D. 11 + 13
- c. Which of the following are relatively prime numbers?
 - A. 8 and 9
- B. 7 and 14
- C. 2 and 3
- D. 10 and 5

d. The G.C.F from the opposite Venn diagram

 $A.5 \times 2$



- $B.5 \times 3$
- $C.7 \times 2$
- $D.2 \times 3$

- e. $\frac{5}{4} \frac{3}{4} = -$
 - A. $\frac{1}{2}$

- D. $\frac{1}{24}$

3. Samir ate $\frac{1}{4}$ of the cake and Seif ate $\frac{1}{3}$ of the same cake.

How much of the cake has been eaten?

4. Use Venn diagram to find G.C.F and L.C.M of :

- a. 15 and 10
- b. 27 and 4

Unit One Assessment



Choose the correct answer.

- 1. The G.C.F of 15 and 30 is
- A. 15

B. 30

C. 5

D. 3

- 2. 24 + 16 =
 - **A.** 16 [2+1] **B.** 8 [3+2]
- C. 2[12+6]
- **D.** 4[6+12]

- 3. $840 \div 35 =$
 - A. 23

B. 24

- C. 18
- D. 16

- 4. $3\frac{1}{2} + 4\frac{3}{4} =$
 - A. $8\frac{1}{2}$
- B. $7\frac{4}{7}$
- c. $7\frac{4}{6}$
- **D.** $8\frac{1}{4}$

- 5. L.C.M of 7 and 14 is

B. 1

C. 7

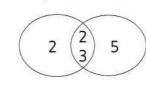
D. 14

- 6. $\frac{2}{7} + \frac{1}{7} + \frac{3}{7} + \frac{4}{7} =$
 - **A.** $\frac{7}{9}$
- B. $1\frac{2}{7}$
- C. $1\frac{3}{7}$
- D. $1\frac{4}{7}$
- 7. The opposite Venn diagram represent prime factorization of two numbers then G.C.F of them =
 - A. 2

B. 4

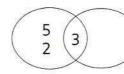
C. 6

D. 10



2. Complete.

- 1. $\frac{3}{5} + \frac{1}{4} =$
- 2. 8 + 12 = 4 (-----+
- 3. is a multiple of any number.
- 4. The opposite Venn diagram represent prime factorization of two numbers then G.C.F of them =



- 5. $2,253 \div 53 = -$
- 6. $5\frac{2}{3} 2\frac{1}{4} = -----$
- **7.** 7 [2 + 5] = 14 +
- 8. The common factor for all number is

3. Choose the correct answer.

- 1. Which of the following are relatively prime numbers?
 - A. 4 and 6
- B. 8 and 15
- C. 8 and 18
- D. 8 and 24

- 2. The L.C.M of 6 and 10 = _____
 - **A.** 6

B. 2

- C. 20
- **D**. 30

- 3. 20 + 40 =
 - **A.** 20[0+20]
- **B.** 20[1+2]
- C. 20[0+2]
- **D**. 20

- 4. $1\frac{1}{6} \frac{2}{3} =$
 - **A.** $1\frac{1}{3}$
- **B.** $1\frac{2}{3}$

- c. $\frac{1}{2}$
- D. $\frac{1}{4}$

5. The opposite Venn diagram represent prime factorization of two numbers then G.C.F of then = _____



A. 0

B. 6

- C. 42
- **D**. 1

3

- **6**. 45 + 27 = 9 [----]
 - **A.** 9 + 3
- **B.** 5 + 3
- C. 9 3
- **D.** 4+2

- 7. $\frac{1}{4} + \frac{1}{5} =$
 - A. $\frac{2}{9}$

B. $\frac{9}{5}$

- c. $\frac{9}{20}$
- **D.** $\frac{1}{20}$

4. Answer the following questions.

- 1. A merchant paid 5,287 L.E. to buy 17 boxes of apple. Find the price of each box.
- 2. Find L.C.M and G.C.F of two numbers 24 and 30 by using Venn diagram.
- 3. If Khaled has 28 pieces of apple and 35 pieces of banana, what is the greatest number of bags he can prepare with no pieces left over?

Write the expression which represents the total number of fruits.

- 4. Fatema found the packages of bananas. She opened 4 packages each package contains 8 and use some to make some banana pudding. This what remains of banana packages. $\frac{3}{8}$, $\frac{5}{8}$, $\frac{2}{8}$, $\frac{6}{8}$.
 - **a.** If you were to regroup the bananas into full packages, how many full packages could be made from the remaining bananas?
 - b. How much in terms of whole packages did Fatema actually use?

5

Till lessons (1 & 2) unit 2

1. Choose the correct answer.

2	Thocm	alloct	natural	number	ic	
a.	1116 2111	allest	Hatulat	Hullibel	13	_

$$A. - 2$$

B.
$$-1$$

$$A. - 8$$

A.
$$-1$$

$$B. - 2$$

$$C. - 3$$

$$D. -4$$

A.
$$\frac{15}{2}$$

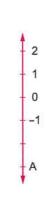
B.
$$\frac{15}{3}$$

c.
$$\frac{15}{4}$$

D.
$$\frac{15}{6}$$

$$B. -1,000$$

2. Complete the following.



3. Arrange the following integers from least to greatest.

6

Till lesson 3 unit 2

1. Choose the correct answer.

a. The number = 1.5 in the form $\frac{a}{h}$ is =

A.
$$-\frac{1}{5}$$

B.
$$-\frac{5}{1}$$

C.
$$-\frac{15}{10}$$

D.
$$-5\frac{1}{10}$$

b. The best subset for the number 4 is

A. counting number

B. natural number

C. integers

D. rational number

c. The smallest positive integer number is _____

d.
$$\frac{1}{4} + \frac{2}{4} + \frac{3}{4} + \frac{2}{4} =$$

c.
$$\frac{7}{8}$$

D.
$$\frac{5}{8}$$

e. Which of the following is the greatest number? —

$$A. - 2.7$$

$$B. - 7.2$$

$$C. -1.2$$

$$D. - 2.1$$

f. The G.C.F of 4 and 9 is _____

2. Write "a subset" or "not a subset".

a. Set of counting numbers is _____ of set of rational numbers.

b. Set of natural numbers is _____ of set of counting numbers.

c. Set of rational numbers is ______ of set of integers.

d. Set of integers is ______ of set of rational numbers.

3. Write "belongs" or "does not belong":

a. 0 _____ to set of rational numbers.

b. |-7| to set of natural numbers.

c. $2\frac{1}{2}$ to set of integers.

d. $\frac{15}{3}$ to set of counting numbers.

4. A factory produces 92 pieces of cloth daily.

How many days does it produce 4,876 pieces of cloth?

7

Till lesson 4 unit 2

1. Choose the correct answer.

- a. The rational number between 2.5 and 2.4 is
 - A. 2.53
- B. 2.43
- **C**. 2.3
- D. 2.32
- **b.** In the equation: $2,595 \div 8 = 324 R 3$, the remainder is
 - A. 2,595
- **B.** 8

- C. 324
- **D**. 3

- - **A.** 3
- **B.** 21

C. 4

D. 147

- d. The opposite of zero is
 - A. -1
- **B** 1

C. 0

D. has no opposite.

- e. The number $= 2\frac{1}{4}$ in the form $\frac{a}{b}$ is
 - A. $-\frac{4}{9}$
- B. $-\frac{9}{4}$
- C. $-\frac{7}{4}$
- D. $-\frac{21}{4}$

2. Write the correct sign "< , = or >".

- **a**. -3 -7
- c. $-\frac{1}{2}$ 0
- e. 0.4 0.5
- g. 0 __2

- **b.** $4\frac{1}{2}$ 5
- d. $-\frac{7}{5}$ $-1\frac{2}{5}$
- f. -12 -4
- **h.** 2.5 2.47

3. Find two rational numbers lying between:

- a. 2.4 and 2.5
- **b.** $-\frac{3}{5}$ and $-\frac{1}{2}$

4. Arrange the following from greatest to least.

$$3, -\frac{7}{2}, \frac{5}{2}, 3\frac{1}{4}, 0, -11$$



Till lessons (5 & 6) unit 2

- 1. Complete the following.
 - **a.** The opposite of $\left|-\frac{1}{2}\right|$ is _____
 - **b.** If |x| = 4, then x =_____ or ____
 - c. The smallest counting number is _____
 - d. The number of integers between 4 and zero is
 - e. |-2| × |0| =
 - f. 15,015 ÷ 15 =
- 2. Choose the correct answer.
 - **a.** | 2.71 | _____ 2.7
 - A. <
- B. >

- C. =
- **b.** If |-99| = x, then x = -
 - A. 99
- B. 99
- C. 9
- D. 9

- c. |-11|>____
 - A. 10
- B. 11

- **C.** 13
- D. 101
- d. The distance between 4 and its opposite on the number line is _____ unit[s]
 - A. zero
- B. 4

C. 8

- D. 16
- 3. In a lab, there are two freezers at different temperatures to preserve meat.

Freezer A is
$$-1^{\circ}$$
C and Freezer B is -5° C

- a. Which integer is greater?
- **b.** Which temperature is colder? Explain how you know.

Unit Two Assessment



Choose the correct answer.

- 1. Which of the following is an integer?
- A. 3.75
- B. $-\frac{3}{7}$
- c. $\frac{7}{7}$

D. $2\frac{1}{2}$

- 2. The smallest natural number is
 - $A_{1} 1,000$
- B. -1
- **C**. 0

D. 1

- 3. $-\frac{3}{4}$ $-\frac{1}{2}$

B. <

C. =

- 4. |-8|> A. |-9|
- B. | -7
- C. 9

D. 8

- 5. The opposite number of $-\frac{3}{8}$ is
 - A. $-\frac{3}{9}$

- C. $-\frac{8}{3}$
- D. $\left| -\frac{3}{8} \right|$

- 6. The integer which comes just before 3 is

- C. -1

D. 0

- 7. The best subset for of the number 2 is -
 - A. a counting number

B. an integer

C. a natural number

D. a rational number

Complete the following.

- 1. |-3| × |-4| = ____
- 2. A negative number with an absolute value greater than 8 is -
- 3. Absolute values of opposites are
- 4. The smallest positive integer number is
- 5. The integers between 4 and 1 are
- 6. $-3\frac{1}{4}$ in the form $\frac{a}{h}$ is —
- 7. From the opposite number line the integer for point A is and its opposite is



8. The number of integers between – 5 and 2 is

Choose the correct answer.

- 1. The rational number between 3.1 and 3.17 is
 - A. -3.2
- **B.** 3.15
- C. -3.14
- **D.** -3.18

- 2. Which of the following is the greatest number?
 - A. -10
- **B**. |_10|
- C. 11
- D. 9
- 3. The set of counting numbers ———— the set of rational numbers
 - A. belongs
- B. does not belong C. is a subset of
- D. is not a subset of

- 4. The additive inverse of |-2| is
 - A. 2

- C. $-\frac{9}{3}$
- **D.** $-\frac{12}{4}$

- 5. |-3|+|-2|=-

- C. 6
- **D**. 0

- 6. All integers are also _____ numbers.
 - A. counting
- B. natural
- C. rational
- 7. 3 set of natural numbers.
 - A. belongs
- **B.** does not belong **C.** is a subset of
- D. is not a subset of

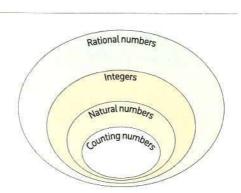
Answer the following questions.

Arrange in a descending order :

$$-8, |-7|, 2, 0, -5$$

The order is: -

- 2. Find a rational number lying between $\frac{3}{5}$ and $\frac{2}{3}$
- 3. Write the following numbers in the opposite Venn diagram. $34, 2\frac{1}{4}, 0.225, -10, 0, \frac{-7}{8}$



4. Represent – $3\frac{1}{4}$ on the number line.

Till lessons (1 & 2) unit 3

1. Choose the correct answer.

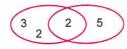
- a. In the algebraic expression: 5x 4 + 5m + 3, the two like terms are
 - A. 3 and 5 m
- B. 5 x and 5 m
- \mathbf{C} . 3 and -4
- **D.** 5 x and 3

- b. All the following are integers except
 - A. -4
- B. $\frac{10}{5}$
- c. $\frac{13}{5}$
- c. The number of terms of the expression: 5 2 m 3 m + 4 is
 - A. 5
- $B_{1} 2$
- C. -3
- D. 4
- **d.** The coefficient in the algebraic expression: 4×-3 is
 - A. 4
- B. 4x
- C. 3
- **D.** x 3
- e. If the price of 12 pens of same kind is 414 L.E., then the price of each one is ______ L.E.
 - A. 35.4
- B. 426
- C. 34.5
- **D**. 34

Complete the following.

a. In the opposite Venn diagram

the G.C.F is _____



- **b.** The constant in the expression 3 y + 2 x 5 is _____
- c. The number of terms of the expression: 3 + 4 z is _____
- **d.** 18 + 12 = 6 (----+2)
- e. The smallest counting number is _____
- f. The opposite of | 4 | is _____

3. Write [numerical expression or algebraic expression] for each of the following:

a. 5(3+4)

- [____] b. 2m-3

c. 5 - x + 3y

- [____] d. 4+(5-3)+1

4. Order from greatest to least.

$$-\frac{7}{10}$$
, $\frac{3}{5}$, 0.4, $-\frac{4}{5}$, zero

10

Till lesson 3 unit 3

1. Complete the following.

a. The verbal expression for "2 m - 7" is _____

b. The number of integers between 4 and its opposite is _____ integers.

c. The algebraic expression for "a number less 7" is ______

d. |-4|+|-7|=

e. Ramy works x hours daily, then the algebraic expression for the number of worked hours monthly is _____

2. Choose the correct answer.

a. Twice the difference of a number and 5 is

A. 2y + 5

B. 2y - 5

C. 2(y+5)

D. 2(y-5)

b. Laila saved n L.E. and her mother gave her 5 L.E. , she will have _____ L.E.

A. n - 5

B. n + 5

C. 5 n

D. 5 - n

c. Which of the following are like terms?

A. 3x,3y

B. xy,yz

C. 31 x , 13 x

D. x , y

d. The distance between the opposite of 3 and 0 on the number line is _____ unit(s)

A. 3

B. – 3

C. 0

D. 6

e. The rational number between 0.3 and 0.4 is

A. 0.2

B. 0.42

C. 0.32

D. 0.432

f. Eslam is x years old now, how old will he be after 6 years?

A. x ÷ 6

B. 6 x

C. 6 + x

D. x – 6

3. From the opposite Venn diagram, complete:

a. The value of m is _____

b. The value of n is _____

3 2 5

Prime factors

Prime factors

c. G.C.F is _____

d. L.C.M. is _____

4. Ahmed ate x sandwiches and his father ate 6 sandwiches. If the price of each sandwich is 5 L.E., write the algebraic expression to find the cost of all sandwiches.

1 Complete the following:

Unit 1

1 If
$$13 \times 35 = 455$$
, then $455 + 13 = \dots$

1 If
$$2,000 + 54 = 37$$
 and the remainder is 2 , then $54 \times 37 = ...$

2 Divide using the standard division algorithm:

6 258



42 1,134



5 9,528

3 Answer the following:

A primary school has 24 classrooms, each class has 50 pupils.

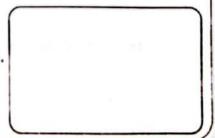
How many pupils does the school have?



The number of rooms in one of the hotels reached 300.

These rooms are divided evenly over 12 floors.

How many rooms are there on each floor?



1 Complete the following:

Unit 1

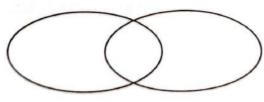
- @ Prime numbers greater than 10 and less than 20 are
- Prime factors of 18 are
- A number whose prime factors are 2, 3, 7 is

2 Choose the correct answer:

- - (0 0 1 0 their sum 0 product)
- The least common multiple of two relatively prime numbers is
 - (0 0 1 0 their sum 0 their product)
- The greatest common factor of the numbers 10 and 9 is
 - $(0 \oplus 1 \oplus 4 \oplus 5)$
- 8 and are relatively prime numbers.
- (4 0 12 0 9 0 6)
- The two numbers are relatively prime numbers.

(2 and 4 0 4 and 6 0 6 and 9 0 9 and 4)

3 The GCF and LCM for the 16 and 12 using a Venn diagram:



on Lesson 3

1 Choose the correct answer:

Unit 1

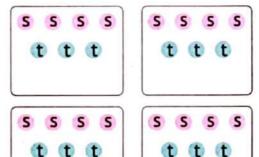
$$((4 \times 2) + (4 \times 9) \odot 4 \times 2 + 9 \odot 4 \times 2 \times 9 \odot (4 + 2) \times (4 + 9))$$

$$(6 \times 3 \times 2 \odot 6 + (3 \times 2) \odot 6 \times (3 + 2) \odot 6 \times 3 \times 6 \times 2)$$

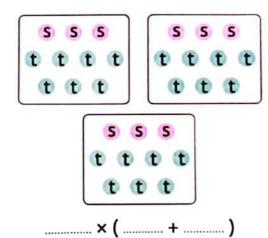
$$(6 \oplus 9 \oplus 2 \oplus 3)$$

$$(0 \oplus 1 \oplus 2 \oplus 3)$$

0



O



3 Sameh wanted to divide the 21 pens and 35 notebooks into groups, so that each group contained the same number of supplies. What is the largest number of sets that can be made for each type of supplies so that each set has the same number? How many pens are in each group? How many notebooks are in each group?

4 on Lesson 4

1 Choose the correct answer:

$$\frac{3}{5} + \frac{9}{10} = \dots$$

$$5 \cdot 10$$
 $1 \cdot \frac{4}{5} + 2 \cdot \frac{1}{3} = \dots$

$$\Theta$$
 3 $\frac{1}{2}$ - = 1 $\frac{3}{8}$

3
$$\frac{5}{6}$$
 + 1 $\frac{1}{3}$ = 4 +

$$(\frac{1}{10} \odot 1 \frac{1}{2} \odot 1 \frac{1}{5} \odot \frac{12}{15})$$

Unit 1

$$(4\frac{2}{15} \odot 3\frac{2}{18} \odot 4\frac{5}{8} \odot 3\frac{5}{8})$$

$$(2\frac{5}{8} \odot 1\frac{1}{8} \odot 1\frac{5}{8} \odot 2\frac{1}{8})$$

$$(2 \odot 1 \frac{1}{6} \odot 2 \frac{2}{6} \odot 4 \frac{2}{3})$$

2 Complete the following:

$$\Theta 2 \frac{1}{3} + 1 \frac{1}{4} = \dots$$

6
$$2\frac{1}{2} - 1\frac{7}{8} = \dots$$

3 Answer the following:

a Hanaa has $15\frac{1}{2}$ pounds, She bought a ruler for $4\frac{1}{2}$ pounds and a pen for $5\frac{1}{2}$ pounds. How much money is left with Hanaa?

You buy a package of dates containing 16 dates. You had already eaten one when you remembered that you owed your friend half a packet of dates.

- 1 What fraction represents the number of fruits that you have to give to your friend?
- 2 After giving your friend his share, what fraction is the remaining amount of the fruit packet?

PONY - Math Prim. 6 - First Torm (21)

Assessments on Units

Assessment on Unit



First: Choose the correct answer:

6 If
$$574 = 41 \times 14$$
, then $580 \div 41 = 14$, and the remainder is

$$6 \times (7 + 5) = \dots$$

$$((6 \times 7) + (6 \times 5) \odot 6 \times 7 + 5 \odot 6 \times 7 \times 5 \odot (6 + 7) \times (6 + 5))$$

$$\bigcirc$$
 (2 X 8) + (2 X 3) =

$$(2 \times 8 \times 3 \odot 2 + (8 \times 3) \odot 2 \times (8 + 3) \odot 2 \times 8 \times 2 \times 3)$$

$$1\frac{3}{4} + 2\frac{1}{2} = \dots$$

$$(4\frac{1}{4} \odot 3\frac{1}{4} \odot 3\frac{4}{6} \odot 4)$$

Second: Complete the following:

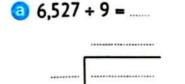
(a) If
$$1,050 \div 12 = 87$$
, and the remainder is 6, then $12 \times 87 = ...$

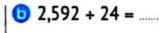
b If
$$351 \div 27 = 13$$
, then $13 \times 27 = \dots$

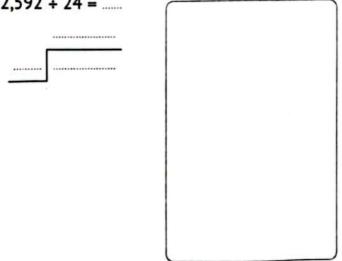
- All prime numbers are odd numbers, except is an even number.
- is the smallest prime number.
- Any two numbers are relatively prime numbers if their greatest common factor is
- The least common multiple of any two prime numbers is
- (1) 8 × (2 + 7) = (.....×) + (.....×)
- $0.3\frac{1}{5} + \dots = 5\frac{1}{2}$

Answer the following: Third:

1 Find the result:







- \circ 5 $\frac{3}{8}$ + 2 $\frac{5}{6}$ =
- $\frac{1}{4} 3\frac{3}{5} = \dots$
- 2 A compound consists of 840 housing units, each building within this compound consists of 15 housing units.

How many buildings in this compound?

on Lessons 1&2

Unit 2

1 Choose the correct answer:

The integer that expresses (the depth of a well of 5 meters) is

$$(-5 \odot 5 \odot -10 \odot 10)$$

6 An integer between the numbers 2 and -2 is $(-1 \odot -3 \odot 3 \odot -4)$

$$(-8 \odot 8 \odot -9 \odot -7)$$

2 Complete the following:

The integer that expresses "move forward 6 steps" is

ⓑ Integers between −3 and 2 are

The additive inverse of 8 is

The smallest positive integer is

3 Arrange the following integers in an ascending order:

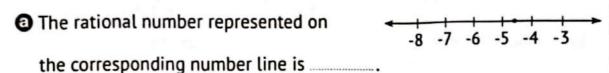
Locate each of the following points on the number line:

Point	Α	В	С	D	Е
Number	0	3	-2	5	-3

on Lessons 3&4

Unit 2

1 Choose the correct answer:



$$(4\frac{1}{2} \odot 5\frac{1}{2} \odot -5\frac{1}{2} \odot -4\frac{1}{2})$$

(counting number @ natural number @ negative integer @ odd number)

(counting onatural oneven on rational)

$$(5 \odot -5 \odot -\frac{1}{5} \odot \frac{1}{5})$$

$$\Theta$$
 -2 $\frac{3}{4}$ is between the two whole numbers

Complete each of the following:

- The additive inverse of 5.9 is
- All natural numbers arenumbers andnumbers.
- **1** \bullet -2.5 in the form $\frac{a}{b}$ is

(In its simplest form)

 $\Theta - \frac{7}{4}$ in the decimal form is ______.

3 Arrange the following numbers in a descending order:

7.7 , 7 , -3.8 ,
$$7\frac{1}{2}$$
 , $-3\frac{1}{5}$

Assessme

Lessons 5&6

Unit 2

Choose the correct answer:

$$(1.5 \odot -1.5 \odot 15 \odot -15)$$

$$(-2.7 \odot 2.7 \odot 27 \odot -27)$$

$$(10 \odot 0 \odot -1 \odot 1)$$

(closer number to @ farther number to @ equal number to)

2 Complete the following:

1 If
$$k = |-3.5|$$
, then $k =$

3 Arrange the following numbers in a descending order:

$$0.75$$
 , $-\frac{1}{8}$, $\left|-\frac{1}{2}\right|$, $-\frac{1}{4}$, $\left|0.25\right|$

4 Complete using (< , = or >):

$$\Theta | 3\frac{1}{4} | | | -4\frac{1}{3} |$$

$$|-4\frac{1}{3}|$$

$$0 - \frac{2}{5}$$

6
$$-\frac{2}{5}$$
 $|-\frac{1}{2}|$

Accumulative Assessments

on Units 1-2

Assessment 1

7 Assessment							
First: Choose the correct answer:							
(a) If $6,688 = 19 \times 352$, then $6,694 \div 19 = 352$, and the remainder is							
(14 @ 41 @ 6 @ 16)							
(5) The greatest common multiple of 9 and 8	is						
The prime factors of 20 are							
	0 5 x 4 0 2 x 2 x 5 0 1 x 20)						
All negative numbers arezero.	(< 0) = 0) > 0) >)						
□ -25 -12	(< ፴ = ፴ > ፴ ≥)						
Second: Complete the following:	and the second						
No. of Section 1975							
② 6 × (7 + 5) = (×) + (×)							
6comes just before –1.							
is the opposite number of "10".							
The integer that expresses (The value of the contract of	he loss is 20 LE) is						
If 7 = I a I, then a =or							
Third: Answer the following:							
If the total price of 25 books is 2,825 pour	nds,						
then what is the price of one book?							
6 Ahmed wants to plant 45 sunflower plants	s and 81 corn plants in his						
garden. If he put the same number of plan	ts in each row,						
what is the greatest number of rows can h	ne make?						
	=						
	=						
	GCF=						
	GCF						

First: Choose the correct answer:

The rational number represented on -8 -7 -6 -5 -4 -3 the corresponding number line is

$$(4\frac{2}{2} \odot 5\frac{2}{3} \odot -4\frac{2}{3} \odot -5\frac{2}{3})$$

- 12 and are relatively prime numbers. (16 @ 15 @ 35 @ 20)
- O The opposite of 6 > $(-5 \odot 5 \odot -7 \odot 7)$
- $\frac{3}{5} = -\frac{5}{3}$ $(> \bigcirc = \bigcirc < \bigcirc >)$
- \bigcirc 4 is to the right of on the number line. (-5 \bigcirc 5 \bigcirc -3 \bigcirc 3)

Second: Complete the following:

- a The additive inverse of is itself.
- $\frac{5}{4} = \dots$ (In the decimal form)

dis a number whose prime factors are 3, 2, 7.

$$\bigcirc$$
 3 $\frac{1}{5}$ + = 8 $\frac{1}{2}$

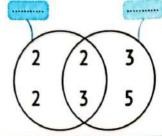
Third: Answer the following:

1 Find the results:

$$\boxed{3}\,\frac{5}{8} + 4\,\frac{1}{6} = \dots$$

- Complete the following using the opposite Venn diagram.

 - The GCF is O The LCM is



on Lessons 1&2

Unit 3

1	Comp	lete	fol	lowing:
	OUp			

- **1** The algebraic factor in the term " $2.5 \times$ " is ______.
- The coefficient in the algebraic term 3 x y is
- \odot The number of terms in the algebraic expression 3 \times y 25 is ______.
- **1** Like terms in the algebraic expression 6x + 6y + 2x + 6 are ______.
- The constant in the algebraic expression 5 b + 3.2 is _____.

Choose the correct answer:

(2a,3ab @ 3ab,3 @ 2a,3 @ none)

\bigcirc The coefficients in the algebraic expression "5 a + 3 b + 8 - 2.5" are

(5,3 @ 8,2.5 @ 5 a, 3 b @ 5,3,8,2.5)

- Ahmed and Tamer have 60 pounds, if what Ahmed has is x pounds, then what Tamer has is _____ pounds. $(60 + x \odot 60 x \odot 60 x \odot 60 + x)$
- **1** The number of terms of the algebraic expression 2.5 x + 2 x y 4 is....

(3 @ 4 @ 5 @ 6)

② Constants in the algebraic expression: 5 a + $\frac{2}{3}$ - 2 b + 4 are _____

 $(5,2 \odot \frac{2}{3},4 \odot 5,\frac{2}{3} \odot 2,4)$

3 Complete using the mathematical expression

"5 x + 2y + 6 x + 3":

- The number of terms of a mathematical expression is ______.
- **6** Like terms are
- Coefficients are
- d Constants are

2 on Lesson 3

1 Complete the following:

Unit 3

- **1** The verbal form for the algebraic expression $\frac{a}{5}$ + 3 is
- The verbal form for the algebraic expression 6 m is
- ♠ Ahmed is now "y" years old. How old was he 3 years ago? ______.
- Ahmed shared a pizza pie equally with 4 of his friends, each of whom had their share of the pizza is (________).

Choose the correct answer:

The number "m" plus 18 and the result divided by 3 =

$$(3 \div (m + 18) \odot (m + 18) \div 3 \odot \frac{m}{3} + 18 \odot m + \frac{18}{3})$$

• If "b" is an integer, then the integer immediately next to it is _____.

$$(b+1 \odot b-1 \odot 2b \odot \frac{b}{2})$$

● A square of side length "s" cm has a perimeter ofcm

$$(s + 4 \odot s - 4 \odot \frac{s}{4} \odot 4 s)$$

• Two numbers whose sum is 35 and one of them is "w", then the other

The price of a kilogram of meat increased by 120 pounds. If its price becomes "x" after the increase, then its price before the increment is

$$(x + 120 \odot x - 120 \odot 12 - x \odot 120 x)$$

3 Bassem runs one kilometer in 15 minutes.

Write a mathematical expression that expresses the number of kilometers that Bassem runs in "t" minutes.





October Questions Bank



Question 01

Choose the correct answer

	() AF "		9	G10 A	
1	The coefficient in	the expression 6 d + 2 is	s		
	a 6	b d	© 6d	a 2	
2	The smallest nun	nber from the following is	S		
T	a 0.11	b 0.101	© 0.20	d 0.3	
3	The greatest neg	ative integer is			
500	a 1	b -1	© 0	d -100	0,000
4	$\frac{3}{7} + \frac{2}{5} = \dots$				
160	(a) $\frac{5}{12}$	$\frac{29}{35}$	\bigcirc $\frac{1}{2}$	a 1	
(5)	3(5+4)=(3x				
	a 5,3	b 5,4	© 3,5	d 3,4	
6	The opposite of t	he number 15 is			
	a 15	b 1151	© -15	@ I-1	51
7	The additive inve	rse of I - 41 is			
5	a 4	b 141	© -4	d 1-4	1
9	Which of the follo	owing are relatively prime	e numbers ?		
h	a 2,6	b 3,21	© 9,12	d 8,15	5
10	The LCM of 5 and	15 is			
030	a 5	b 15	© 1	d 3	
(11)	The GCF of 5 and	15 is			
1	a 5	b 15	© 1	d 3	
12	The common fac	tor of all number is	1° 50 85		
W.	a 0	b 1	© 2	d 100	1360
(13)	The GCF of any b	vo different prime numb	ers is		





itself

The smallest

number

primary 6 - first term

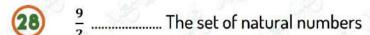


14	The	LCM o	f any two diffe	erent	prime numbers is		5		
9-	(a)	1		b	The product of them	©	The smallest number	d	The greatest number
15	The	divide	nd in 321 ÷ 12 =	26 R	9 is				
	(a)	321		b	12	©	26	d	9
16	The	divisor	in 321 ÷ 12 = 2	6 R9	is				
100	a	321		b	12	©	26	d	9
17	Whi	ich of tl	he followin <mark>g i</mark> s	near	est to zero ?				
W	(a)	5		b	-1	C	-3	d	3
18	The	numbe	e <mark>r -3.5</mark> in the f	form $\frac{a}{h}$	is				
	(a)	$\frac{7}{2}$		b	3 5	©	35 10	d	$-\frac{7}{2}$
(19)	Whi	ich of tl	he following is	the g	reatest number?				6
3	(a)	-5.3	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	b	-3.5	©	3.5	d	5.3
20	Whi	ich <mark>of</mark> tl	he following is	the s	mallest number ?	Sa			
	(a)	-3.2		b	-2.3	©	-0.5	d	-0.01
21	The	best s	ubset for the r	numb	er -3 is				
	a	Coun	ting numbers	b	Rational numbers	©	Integers	a	natural numbers
22	The	best su	ubset for the r	numb	er 5 is				
	(a)	Cour num		b	Rational numbers	©	Integers	a	natural numbers
23	The	best s	ubset for the r	numb	er 5.2 is				
9	(a)	Coun	ting numbers	b	Rational numbers	©	Integers	d	natural numbers
24	The	Set of	counting num	bers .	The set	of ratio	onal numbers	6	
5	(a)	Belo	ng 🚽	b	not belong	©	subset	d	Not subset
25	The	Set of	integers		The set of natural	numbe	ers		
79	a	Belo	ng	b	not belong	©	subset	d	Not subset
26	-5	9	The set o	of rati	onal numbers				
7	(a)	Belo	ng	b	not belong	©	subset	d	Not subset
(27)	8 2	J	The set of	counl	ting numbers				
	(a)	Belo	ng	b	not belong	©	subset	d	Not subset









- a Belong
- **b** not belong
- © subset
- Not subset

a 6

b -6

- © 12
- **d** -12

a -15

b 15

- © Both a,b
- d neither

a -5

(b) 5

- © Both a,b
- d neither

The number of terms in the expression
$$6d+2-5n \div 4$$
 is terms

a 1

(b) 2

- © 3
- d 4

- a 2f, 2k
- **b** 2,8
- © 2,2k
- d 2f, 2

The constant in the expression
$$6 d + 2 - 5 n$$
 is

a 6

(b) d

- © 5n
- **d** 2

$$\frac{2}{7} + \frac{1}{7} + \frac{2}{7} + \frac{5}{7} = \dots$$

- (b) $\frac{10}{28}$
- \bigcirc $\frac{8}{7}$
- d $1\frac{3}{7}$

$$\frac{36}{6} + \frac{1}{2} = \dots$$

 $\bigcirc 2 \quad \frac{1}{2}$

b $\frac{3}{6}$

© 1

d $\frac{4}{8}$

- (a) 3(6d+5)
- **b** 8+6
- © 2n-9
- d 4-h

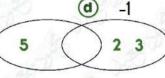
38 Which of the following is algebraic expression?

- a 4(6+5)
- **b** 4-1+2
- © 20÷9
- **d** 3h

(a) 0

b

© -2



- The opposite Venn diagram represent prime factorization of two numbers then GCF of them is
 - a 0

b 1

- © 5
- **d** 2





	All counting numbers are also
(4)	All counting numbers are also

- natural numbers
- (b) Rational numbers
- (c) Integers
- All of them

- (a) 1-9.991
- I 100 I
- 1-51

$$5(8 + \dots) \times 7$$
 is a numerical expression.

- (c)
- 19 + n

5

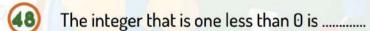
- 5_m
- 18 + 2
- 13

2 multiplied by x decreased by 4

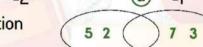
- (b) 2 multiplied by x more than 4
- Double a number x increased by 4
- (d) Double a number b increased by 4

- (a) 5 multiplied by m decreased by 3
- The difference between m and 3 multiplied (b) by 5
- C The sum of m and 3 multiplied by 5
- (d) The product of m and 3 multiplied by 5

- (a) 5 + 3x
- 3x + 5
- $\frac{1}{3}x 5$ (c)
- $\frac{1}{3}x + 5$



- -1
- The opposite Venn diagram represent prime factorization of two numbers then the two numbers are

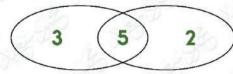


- Prime
- Relatively prime © Odd
- even

Question 02

Complete

- (1)The smallest positive integer is
- (2) The smallest non-negative integer is
- (3) The greatest non-positive integer is
- The opposite Venn diagram represent prime factorization 4 of two numbers then LCM of them =



- (5) The integers between -5 and -1 are
- The number of integers between -5 and -1 are

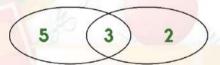








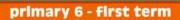
- **8** 4 + 10 = 2 (..... +
- $9 \quad 6\frac{3}{10} 2\frac{1}{5} = \dots$
- The opposite of the number 50 is
- 11 The LCM of 5 and 7 is
- 12) The GCF of 5 and 7 is
- 13 The GCF of 8 and 9 is
- 14 The LCM of 8 and 9 is
- 15) 864 ÷ 24 =
- 16is a multiple of all numbers .
-is a factor of all numbers.
- 18 984 ÷ 5 =
- 19 The quotient in 321 ÷ 12 = 26 R9 is
- The number -2.5 in the form $\frac{a}{b}$ is
- The opposite of zero is
- The smallest positive integer is
- The opposite Venn diagram represent prime factorization of two numbers then GCF of them =



- 24 | -18 | x 0 =
- The smallest counting number is
- The smallest natural number is
- The number of terms in the expression 6h + 2d 3x isterms
- (28) The opposite of the number 1-8.21 is
- The opposite of the number 18.21 is.....
- The two integers that -5.6 is lying between them areandand
- The two integers that $\frac{8}{3}$ is lying between them areandand
- 32 The integer which comes just before -9 is
- 33is one more than -5.









34	All integers are also	numbers
	All littegers are also	HOHIDEIS

$$36 \quad 5 - 3\frac{2}{5} = \dots$$

Question 03

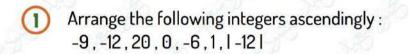
Compare using (<,> or =)

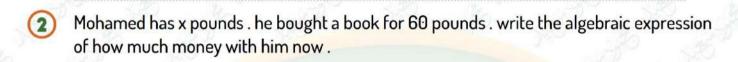
1	-4		7.2-1
2	-100		0
3	I -12 I		12
4	0	<u> </u>	Any negative integer
5	0		Any positive integer
6	2.5		$\frac{5}{2}$
7	$-\frac{7}{5}$		$-1\frac{2}{5}$
8	2.42	J	2.6
9	5.245		6
10	-50		-I-50 I
11	-5 g	7 Jan 35	The additive inverse of 9
12	32.02	r <u></u>	-100
13	-0.8	30	0.6
14	-(-5)	580	-1-51

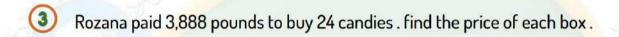


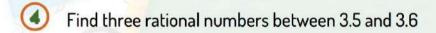
Question 04

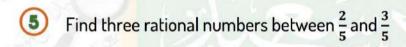
Answer the following



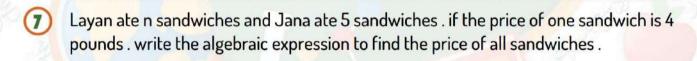








6 The price of 12 pens is 408 LE, find the price of each pen.



8 If Yousef is x years old now . write the algebraic expression of his old after 6 years?

(9) Karem saved e LE. Zyad gave him 40 LE. write the algebraic expression of how much money with him now.

Maya bought $3\frac{1}{5}$ kg of orange and $4\frac{3}{10}$ kg of apple what is the total mass of them?

Represent $-2\frac{2}{5}$ on the number line.







A class has 20 boys and 12 girls . Mr Mahmoud Elkholy want to distribute them into equal groups . What is the greatest number of groups ? , How many boys and girls in each group ? ,then write the expression which represent that .

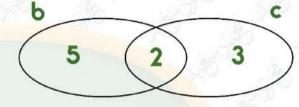
From the opposite Venn diagram:

a- The value of b =

b- The value of c =

c- The GCF =

d- The LCM =



Represent (-5, -3, 0, -6, 2) at the number line.

$$-7$$
 -6 -5 -4 -3 -2 -1 0 1 2 3 4

Find the LCM and the GCF of 18 and 24, using venn diagram .

تم بحمد الله ،

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم





October Questions Bank



Question 01

Choose the correct answer

4-0				
1	The coefficient in th	ne expression 6 d + 2 is		
	a <u>6</u>	b d	© 6d	d 2
2	The smallest numb	er from the following is		
P	a 0.11	b <u>0.101</u>	© 0.20	d 0.3
(3)	The greatest negati	ve integer is		
500	a 1	b <u>-1</u>	© 0	d -1000,000
4	$\frac{3}{7} + \frac{2}{5} = \dots$			
Jio .	$\frac{5}{12}$	b $\frac{29}{35}$	\bigcirc $\frac{1}{2}$	a 1
(5)	$3(5+4)=(3 \times$	00	2	
	(a) 5,3	b 5,4	© 3,5	d 3,4
6		number 15 is		// John L
	a 15	(b) 1151	© <u>-15</u>	@ I-15I
7	The additive inverse			80 \ / ₂
	(a) 4	(b) [4]	© -4	@ I-4I
9	Which of the follow	ing are relatively prime		
	a 2,6	b 3,21	© 9,12	d <u>8,15</u>
(10)	The LCM of 5 and 15		The state of the s	
000	(a) 5	b <u>15</u>	© 1	d 3
(11)	The GCF of 5 and 15		3.50	36 m ³
- 4	a <u>5</u>	b 15	© 1	d 3
(12)		of all number is		
9	a 0	(b) 1	© 2	d 100
(13)	The GCF of any two	different prime numbe		30° 350°



itself

The smallest

number

Math



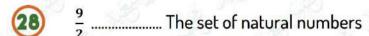


14	The LCM of any two diff	erent	prime numbers is		5		
	a 1	b	The product of them	©	The smallest number	d	The greatest number
(15)	The dividend in 321 ÷ 12	= 26 R	89 is				
	a <u>321</u>	b	12	©	26	d	9
16	The divisor in 321 ÷ 12 =	26 R9	is				
10	321	b	<u>12</u>	©	26	d	9
17	Which of the following i	s near	est to zero ?				
2	a 5	b	<u>-1</u>	©	-3	d	3
18	The number -3.5 in the	form	a is				
	$\frac{7}{2}$	b	<u>3</u>	©	35 10	d	$-\frac{7}{2}$
19	Which of the following i	s the g	greatest number?				b st
1	a -5.3	b	-3.5	©	3.5	d	<u>5.3</u>
20	Which <mark>of</mark> the following i	s the s	smallest number?				
	a - <u>3.2</u>	b	-2.3	©	-0.5	d	-0.01
(21)	The best subset for the	numb	er -3 is				
	a Counting numbers	b	Rational numbers	©	Integers	d	natural numbers
22	The best subset for the	numb	er 5 is				
	a Counting numbers	b	Rational numbers	©	Integers	d	natural numbers
23	The best subset for the	numb	er 5.2 is				
9	a Counting numbers	b	Rational numbers	©	Integers	d	natural numbers
24	The Set of counting nur	nbers	The set	of ratio	onal numbers		
5	a Belong	b	not belong	©	subset	d	Not subset
25	The Set of integers		The set of natural	numb	ers		
	Belong	b	not belong	©	subset	d	Not subset
(26)	-5 The set	of rati	ional numbers	30		3.50	
_	a Belong	b	not belong	©	subset	d	Not subset
(27)	$\frac{8}{2}$ The set o	_		300	5.50	30	450
	a Belong	(b)	not belong	(c)	subset	d	Not subset









- a Belong
- **b** not belong
- © subset
- Not subset

a 6

b -6

- © 12
- d -12

a -15

b 15

- © Both a,b
- d neither

a -5

(b) 5

- © Both a.b
- d neither

The number of terms in the expression
$$6d+2-5n \div 4$$
 is terms

a 1

(b) 2

- © 3
- **d** 4

- a 2f, 2k
- **b** 2,8
- © 2,2k
- d 2f, 2

The constant in the expression
$$6 d + 2 - 5 n$$
 is

a 6

(b) d

- © 5n
- **d** 2

$$\frac{2}{7} + \frac{1}{7} + \frac{2}{7} + \frac{5}{7} = \dots$$

- **b** $\frac{10}{28}$
- \bigcirc $\frac{8}{7}$
- (d) $1\frac{3}{7}$

$$\frac{3}{6} + \frac{1}{2} = \dots$$

(b) $\frac{3}{6}$

© 1

d $\frac{4}{8}$

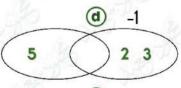
- (a) 3(6d+5)
- **b** 8+6
- © 2n-9
- d 4-h

- a 4(6+5)
- **b** 4-1+2
- © 20÷9
- (d) 3h

a <u>0</u>

b

© -2



- The opposite Venn diagram represent prime factorization of two numbers then GCF of them is
 - a 0

(b) 1

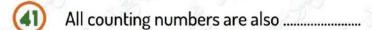
- © 5
- **d** 2



Math







- natural numbers
- (b) Rational numbers
- Integers
- All of them

I - 10 I <

- (a) 1-9.991
- I 100 I
- 1-51

 $5(8 +) \times 7$ is a numerical expression.

(b) 4f

- (c)
- 19 + n

 $5(8 + \dots) \times 7$ is a algebraic expression.

5

- 5_m
- 18 + 2
- 13

The verbal expression for 2x + 4 is

2 multiplied by x decreased by 4

- (b) 2 multiplied by x more than 4
- Double a number x increased by 4
- (d) Double a number b increased by 4

The verbal expression for 5(m - 3) is

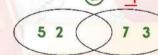
- (a) 5 multiplied by m decreased by 3
- The difference between m and 3 multiplied (b)
- C The sum of m and 3 multiplied by 5
- (d) The product of m and 3 multiplied by 5

Adding 5 to third a number =

- (a) 5 + 3x
- 3x + 5
- $\frac{1}{3}x 5$ (c)

The integer that is one less than 0 is

The opposite Venn diagram represent prime factorization of two numbers then the two numbers are

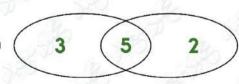


- Prime
- Relatively prime © Odd
- even

Question 02

Complete

- (1) The smallest positive integer is1......
- 2 The smallest non-negative integer is
- (3) The greatest non-positive integer is
- The opposite Venn diagram represent prime factorization 4 of two numbers then LCM of them =30.....30
- **5** The integers between -5 and -1 are-4,-3,-2.....
- 6) The number of integers between -5 and -1 are3......





Math

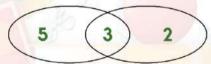






$$9 \quad 6\frac{3}{10} - 2\frac{1}{5} = \dots 4\frac{1}{10} \dots$$

- The opposite of the number 50 is-50........
- 11) The LCM of 5 and 7 is35.....
- 12) The GCF of 5 and 7 is1............
- (13) The GCF of 8 and 9 is1.....
- 14 The LCM of 8 and 9 is72.....
- 15) 864 ÷ 24 =36......
- 160is a multiple of all numbers .
-1......is a factor of all numbers.
- 984 ÷ 5 =196R4......
- 19 The quotient in 321 ÷ 12 = 26 R9 is26.....
- The number -2.5 in the form $\frac{a}{b}$ is $\frac{25}{10}$
- The opposite of zero is0......
- The smallest positive integer is1......



- 24) I-18 | x 0 =0.....
- The smallest counting number is1.........
- The smallest natural number is0......
- The number of terms in the expression 6h + 2d 3x is3......terms
- (28) The opposite of the number 1-8.21 is-8.2........
- 29 The opposite of the number 18.21 is-8.2.......
- The two integers that -5.6 is lying between them are ...-5....and ...-6...
- The two integers that $\frac{8}{3}$ is lying between them are ...2....and ...3...
- The integer which comes just before -9 is-10......
- 334....is one more than -5.







- All integers are alsorational...... numbers
- Twice the difference between a number and 6 is ...2(x-6)..........
- 36 $5-3\frac{2}{5}=...3\frac{2}{5}....$
- 37 The constant in the expression 5f + 2b + 3 is3.......
- 38 The algebraic expression of a number less than 5 is5-x......
- 39 The algebraic expression of a number less 5 isx-5......
- The coefficient in the expression -5d + 3 is-5.......
- 41 The product of 5 and a number t is5t..........
- 42 | 1-5|+3 =8.....
- 43 The additive inverse of -6 is6........

Question 03

Compare using (<,> or =)

1	-4	8 (2-1
2	-100	<	0
3	I -12 I	= (12
4	0	>	Any <mark>negati</mark> ve intege <mark>r</mark>
5	0	<	Any positive integer
6	2.5	1 () () () () () () () () () (5 2
7	$-\frac{7}{5}$	-	$-1\frac{2}{5}$
8	2.42		2.6
9	5.245	30 < 35T	6
10	-50	5 <u>j</u> =	-I-50 I
11	-5	> m	The additive inverse of 9
12	32.02	6	-100
13	-0.8	100 ×	0.6
(14)	-[-5]	27 SHO	-1-51



Question 04

Answer the following

- Arrange the following integers ascendingly:
 -9,-12,20,0,-6,1,1-121
 -12,-9,-6,0,1,1-121,20
- Mohamed has x pounds . he bought a book for 60 pounds . write the algebraic expression of how much money with him now .

X - 60

Rozana paid 3,888 pounds to buy 24 candies . find the price of each box .

3,888 ÷ 24 = 162 pounds

Find three rational numbers between 3.5 and 3.6

3.51, 3.52, 3.53

Find three rational numbers between $\frac{2}{5}$ and $\frac{3}{5}$

 $\frac{21}{50}$, $\frac{22}{50}$, $\frac{23}{50}$

6 The price of 12 pens is 408 LE, find the price of each pen.

408 ÷ 12 = 34 LE

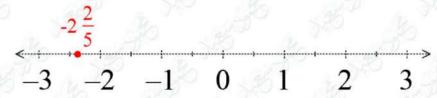
Layan ate n sandwiches and Jana ate 5 sandwiches . if the price of one sandwich is 4 pounds . write the algebraic expression to find the price of all sandwiches .

4(n+5)

- 8 If Yousef is x years old now . write the algebraic expression of his old after 6 years?
 X + 6
- Warem saved e LE. Zyad gave him 40 LE. write the algebraic expression of how much money with him now.

e+40

- Maya bought $3\frac{1}{5}$ kg of orange and $4\frac{3}{10}$ kg of apple what is the total mass of them? $3\frac{1}{5} + 4\frac{3}{10} = 7\frac{1}{2}$ kg
- Represent $-2\frac{2}{5}$ on the number line.





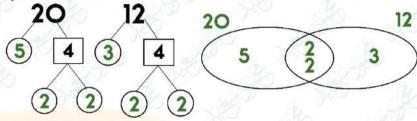
Math





A class has 20 boys and 12 girls. Mr Mahmoud Elkholy want to distribute them into equal groups. What is the greatest number of groups?, How many boys and girls in each group?, then write the expression which represent that.

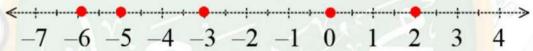
The greatest number of groups is 4
The number of boys is 5
The number of girls is 3
The expression is 4(5+3)



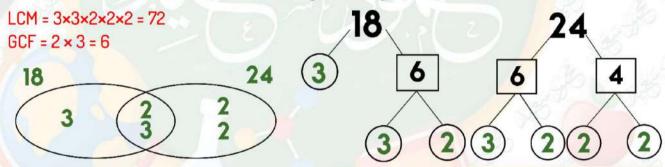
From the opposite Venn diagram:

- a- The value of b =10......
- b- The value of c =6......
- c- The GCF =2......
- d- The LCM =30....

Represent (-5, -3, 0, -6, 2) at the number line.



Find the LCM and the GCF of 18 and 24, using venn diagram.



تم بحمد الله ،

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم



<u>Unit 1</u>



Lesson 1: Using long division in the real world

Example 1:

78 volunteers volunteered in the food bank, and the total number of working hours was 9,689 in a year. If each volunteer worked the same number of hours equally. How many hours did each volunteer work in a year?

0.1		124_
Sol:		78 9689
		78
	$78 \times 1 = 78$	188
Number of modeling because of each	$78 \times 2 = 156$	156
Number of working hours of each	$78 \times 3 = 234$	329
volunteer = $9,689 \div 78 = 124 \text{ hours}$	$78 \times 4 = 312$	312
	$78 \times 5 = 390$	17
	$78 \times 6 = 468$	
9689 ÷ 78 = 124 R17		

Dividend divisor quotient remainder

Example 2:

During a charity campaign for the Food Bank, 6,982 food packages were collected and placed in 93 food cartons, where each carton contains the same number of food packages. If the Food Bank wants to put the largest number of food packages in each carton, then how many packages will each carton contain?

		75
Sol:		93 6982
	$93 \times 1 = 93$	651
	93 × 2 = 186	
	$93 \times 3 = 279$	472
N. J. C. J. W. H. J.	93 × 4 = 372	465
Number of packages will each carton	93 × 5 = 465	7
contain = $6,982 \div 93 = 75$ packages	$93 \times 6 = 558$	
	$93 \times 7 = 651$	
	$93 \times 8 = 744$	
$6982 \div 93 = 75$ R7		
Dividend divisor quotient remainder		

1



(1) $84 \div 3 = \dots$

156 ÷ 6 = (2)

(3) $839 \div 9 = \dots$

(4) 360 ÷ 15 =

 $888 \div 32 = \dots$ (5)

(6) 615 ÷ 41 =



(7)	١	1175	•	ς -	_	
1/		14/3	÷	ა -		

(8) $3776 \div 8 = \dots$

(9) $4935 \div 7 = \dots$

.....

......

.....

(11) $4935 \div 47 = \dots$

(12) 15632÷ 45 =

.....

.....

.....





> Choose the correct answer:

2) If
$$40 \div 5 = 8$$
, then the remainder is

3) If
$$29 \div 3 = 9$$
 R2, then the divisor is



Exercises: Using division in the world around us

> Which situations involve division? Identify all that apply:

1) The 78 volunteers at the food bank donated a total of 9,672 hours for the year. Each volunteer worked the same number of hours. How man, hours did each volunteer donate to the food bank?
The food bank can make one food box that can feed one person, 3 meals per day for two weeks. How many total meals can one food box make?
3) The food bank's top donor donated 1,250 tokens at each of 10 different fundraisers. What is the total donation for all fundraisers?
4) With the 6,975 cans of food collected during the food bank's largest food drive, 93 meal boxes were created with the same number of cans in each box. In order for the food bank to use the most cans, how many cans would be in each box?

Lesson 2

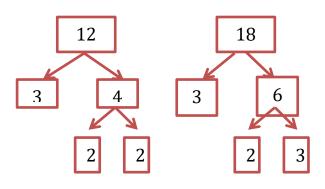


Factorize the number into its prime factor

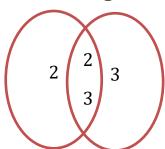
▶ Use Venn diagram to find (G.C.F) and (L.C.M):

EX: Find (G.C.F) and (L.C.M) of the numbers 12, 18 by using Venn diagram

Sol:



Venn diagram



$$12 = 2 \times 2 \times 3$$

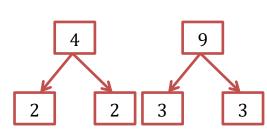
$$18 = 2 \times 3 \times 3$$

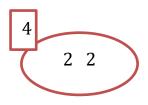
•From Venn diagram:

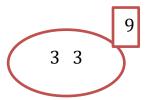
$$G.C.F = 2 \times 3 = 6$$

(Multiply the common factors inside Venn diagram)

EX: Find (G.C.F) and (L.C.M) of the numbers 4, 9 by using Venn diagram







✓ From Venn diagram:

$$G.C.F = 1$$

$$9 = 3 \times 3$$

 $4 = 2 \times 2$

 $L.C.M = 2 \times 2 \times 3 \times 3 = 36$ (Multiply all the numbers inside Venn diagram)

Notes:

- The common factor of all numbers is 1
- The greatest common factor (G.C.F) of any two prime numbers is 1
- The G.C.F of the two numbers which haven't any common prime factors is
- The common multiple of all numbers is 0
- ♣ The (L.C.M) of any two prime numbers is their product.



> Factorize each of the following to its prime factors

Fractorize each of the f	ollowing to its prime fac	tors
a) 4	b) 6	c) 10
d) 8	e) 12	f) 20
g) 16	h) 24	i) 36





> Factorize each of the following to its prime factors:

a) 8 and 10	
b) 12 and 16	
24 10	
c) 4 and 9	
d) 14 and 16	
Complete each of the following	

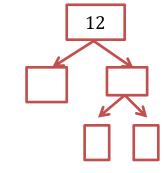
- 1. The smallest prime number is
- 2. The smallest odd prime number is
- 3. The number that its prime factors are 2, 3, 5 is
- 4. The prime factors of 15 are
- 5. The GCF of 2 and 4 is
- 6. The LCM of 10 and 5 is



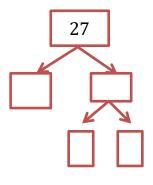
> Complete each of the following

- 1. The prime number between 32 and 40 is
- 2. All prime number are odd except
- 4. The prime factors of 35 are
- 5. The GCF of 12 and 16 is

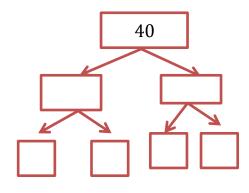
> Factorize each of the following to its prime factors







27 = ×



40 = × ×

> Find using venn diagram the GCF and LCM of

1) 25 and 45

2) 16 and 14



Learn Relatively Prime number

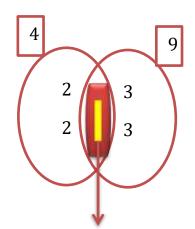
They are numbers whose only common factor is 1

So they are prime numbers with respect to each other

Ex. 4 and 9 are composite numbers.

$$4 = 2 \times 2$$
 $9 = 3 \times 3$

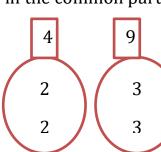
- The greatest common factor of 4 and 9 is 1
- Therefore 4 is a prime number with respect to 9.
- 9 is a prime number with respect to 4.



When there is no prime factors in the common part, then GCF = 1

No common prime factors

So, we draw two distant circles

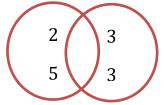


Note:

The lowest common multiple of the relatively prime numbers is their product.

Ex, the common multiple of 4 and 9 is $4 \times 9 = 36$

> Using the following venn diagram,



- 1. The two numbers represented in the venn diagram are and
- 2. The common prime factors of the two numbers are
- 3. The GCF for the two numbers is
- 4. The LCM for the two numbers is
- 5. Are the two numbers relatively prime number?(Yes Or No?)

FUTURES EDUCATIONAL S Y S T E M S

Lesson 3

Writing numerical expression by using G.C.F

Writing numerical expression by using (G.C.F):

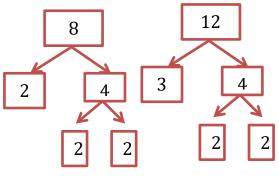
EX:

Sarah wanted to make a number of cartons to donate to charitable organizations; if she had 8 boxes of cheese and 12 bags of legumes, what is the largest number of cartons that can be made so that all cartons include the same number of items?

1. Prime factorization

2. Venn diagram

2



Number of first in each carton

Number of second in each carton

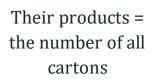
48

$$8 = 2 \times 2 \times 2$$

$$12 = 2 \times 2 \qquad \text{x 3}$$

 $4 \times (2 + 3)$ So, Numerical expression: $(4 \times 2) + (4 \times 3)$ the total number of items: 8 + 12 = 20

Means that: We have 4 cartons each carton has 2 boxes of cheese and 3 bags of legumes



3

EX:

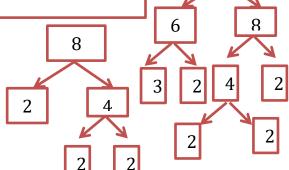
The students collected 36 boxes of cheese and 48 bags of legumes. What is the largest number of baskets of food that can be prepared without any food left?

$$36 = 2 \times 2 \times 3 \times 3$$

$$48 = 2 \times 2 \times 3 \times 2 \times 2$$

$$=$$
 12 × (3 + 4)

$$=(12 \times 3) + (12 + 4)$$





• The Distributive Property states that multiplying a number by the sum of two addends is the same as multiplying that number by each addend individually and then adding those products.

EX.
$$7 \times (3 + 9) = (7 \times 3) + (7 \times 9)$$

Complete the following:		Compi	lete	the	follo	wing
-------------------------	--	-------	------	-----	-------	------

C.
$$8 \times (... \times 2) = (... \times 9) + (... \times 2)$$

- E. The GCF for 9 and 6 is
- F. The GCF of all numbers is

✓ Answer the following:

A. Samo has 12 red crayons and 5 blue crayons, What is the greatest number of groups can Samo divide the crayons into so that all groups contain the same number of both colors?

B. Marwa divided 12 oranges and B candies into bags so that the bogs contained the same number of oranges and the some number of candies writes a numerical expression for this situation.

Choose the correct answer :-



- 1. A Student is given 20 packs of cheese and 40 grain bogs to make food boxes. He uses the expression 10 2+4 to represent how many boxes he could make with equal amounts of food in each box His friend tells him that there is a way to make more boxes. Which one of these expressions would represent his friend's solution?
 - A. 20(2+4) B. 10(1+21) C. 10(1+4) D. 20(1+2)

- 2. 30+50 =
 - A. 10 (3+5) B. 5(6+5)
- C. 10(30+50] D. 2(15+5]
- 3. Petra is making packs for a group of her friends going a trip. Each pack should have the same number of sandwiches and same number of juice if she has 24 sandwiches and 30 juices what is the expression greats number of packs that she can make with no any left over?
 - A. 2 (12+ 15) B. 3(8+10)
- C. 4(6 + 5) D. 6(4 + 5)
- 4. 7(2 + 1) =

 - A. 14 + 7 B. 14 + 1
- c. 14 + 71 D. 72 + 71
- 5. $5(2 + \dots) = 10 + 35$
 - A. 5
- B. 7 c. 2
- D. 8
- 6. 9(1 + 2) = 9 +
 - A. 9
- B. 81 c. 18
- D. 27

Lesson 4



Factorize the least multiple

Adding and subtracting fractions with like denominators:

Ahmed has 3 equal bags of oranges. He wanted to taste the fruit inside each bag to make sure of its quality, the following table represents that:

		8	The sum
The whole	<u>6</u>	<u>6</u>	$\frac{6}{6} + \frac{6}{6} = \frac{12}{6} = 2$
What Ahmed ate	$\frac{3}{6}$	$\frac{4}{6}$	$\frac{3}{6} + \frac{4}{6} = \frac{7}{6} = 1\frac{1}{6}$
Remainder	$\frac{6}{6} - \frac{3}{6} = \frac{3}{6}$	$\frac{6}{6} - \frac{4}{6} = \frac{2}{6}$	$\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$

Generally: when we add or subtract any two fractions with like denominators, we add or subtract the numerators with the same denominators.

EX:
$$\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$$

EX:
$$\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$$

EX:
$$\frac{5}{7} - \frac{3}{7} = \frac{2}{7}$$

EX:
$$2\frac{1}{6} - \frac{3}{6} = 1\frac{4}{6}$$

Adding and subtracting fractions with unlike denominators:

Ahmed wanted to make a meal of oranges and pears by use half bag of oranges and $\frac{1}{4}$ of bag of pears, the following table represents that:

T	8		The L.C.M of denominators	The sum
The whole	<u>6</u>	$\frac{4}{4}$	$6 = 2 \times 3$ $4 = 2 \times 2$	$\frac{12}{12} + \frac{12}{12} = 2$
What Ahmed ate	$\frac{3}{6}$	$\frac{1}{4}$		$\frac{6}{12} + \frac{3}{12} = \frac{9}{12}$
remainder	$\frac{6}{6} - \frac{3}{6} = \frac{3}{6}$	$\frac{4}{4} - \frac{1}{4} = \frac{3}{4}$	L.C.M = $2 \times 3 \times 2 = 12$	$\frac{\frac{6}{12} + \frac{9}{12} = \frac{15}{12} = 1}{\frac{3}{12}} = 1$

A. Find the result:



1- Add:-

$$\frac{3}{5} + \frac{1}{5} = \dots$$

$$\frac{2}{7} + \frac{6}{7} = \dots$$

$$5\frac{1}{4} + \frac{2}{4} = \dots$$

$$\frac{1}{4} + \frac{2}{4} = \dots$$

$$\frac{1}{6} + \frac{5}{6} = \dots$$

$$2\frac{3}{8} + 1\frac{7}{8} = \dots$$

$$\frac{3}{11} + \frac{7}{11} = \dots$$

$$\frac{2}{3} + \frac{2}{3} = \dots$$

$$1+\frac{2}{9} = \dots$$

$$\frac{1}{3} + \frac{1}{4} = \dots$$

$$\frac{1}{5} + \frac{1}{3} = \dots$$

$$2\frac{1}{2} + \frac{2}{4} = \dots$$

$$\frac{1}{4} + \frac{2}{12} =$$

$$\frac{1}{5} + \frac{5}{5} = \dots$$

$$2\frac{3}{4} + 3\frac{7}{3} = \dots$$

$$\left| \frac{3}{3} + \frac{7}{3} \right| = \dots$$

$$\frac{7}{10} + \frac{5}{6} =$$

$$1+\frac{2}{7} = \dots$$

2- Subtract:-

$$\frac{7}{8} - \frac{3}{8} = \dots$$

$$3\frac{3}{5} - 1\frac{1}{5} = \dots$$

$$3 - \frac{1}{5} = \dots$$

$$\frac{3}{5} - \frac{1}{5} = \dots$$

$$5\frac{3}{7}-\frac{6}{7} = \dots$$

$$5 - 1\frac{2}{7} = \dots$$

$$\frac{7}{13} - \frac{4}{13} = \dots$$

$$4\frac{2}{5} - 1\frac{4}{5} = \dots$$

$$1 - \frac{3}{8} = \dots$$

$$\frac{5}{6} - \frac{3}{8} = \dots$$

$$\frac{1}{4} - \frac{1}{5} = \dots$$

$$1\frac{1}{12} - \frac{5}{9} = \dots$$

$$\frac{5}{6} - \frac{7}{12} = \dots$$

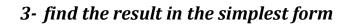
$$\left| \frac{5}{6} - \frac{1}{2} \right| = \dots$$

$$6\frac{4}{5} - 2\frac{1}{4} = \dots$$

$$\frac{3}{4} - \frac{2}{3} = \dots$$

$$\frac{5}{7} - \frac{2}{3} = \dots$$

$$3\frac{2}{3} - 1\frac{2}{5} = \dots$$





$$\frac{1}{5} + \frac{1}{8} = \dots$$

$$\frac{3}{7} + \frac{2}{5} = \dots$$

$$2\frac{1}{3} + 1\frac{1}{2} = \dots$$

$$\frac{1}{4} + \frac{1}{12} = \dots$$

$$\frac{1}{4} + \frac{2}{3} = \dots$$

$$1\frac{3}{5} + \frac{1}{3} = \dots$$

$$\frac{7}{10} + \frac{5}{6} = \dots$$

$$\frac{3}{4} + \frac{4}{5} = \dots$$

$$3\frac{2}{8} + 2\frac{1}{6} = \dots$$

$$4\frac{2}{3} - 2\frac{1}{4} = \dots$$

$$1\frac{1}{12} - \frac{5}{9} = \dots$$

$$10\frac{1}{2} - 5\frac{1}{3} = \dots$$

$$9\frac{3}{7} - 4\frac{1}{6} = \dots$$

$$8\frac{11}{12} - 7\frac{3}{4} = \dots$$

$$10\frac{1}{4} - 3\frac{1}{12} = \dots$$

$$5\frac{5}{8} - 1\frac{1}{3} = \dots$$

$$9\frac{1}{6} - 4\frac{4}{9} = \dots$$

$$4\frac{1}{2} - \frac{1}{4} = \dots$$

A. Choose the correct answer :-

4)
$$\frac{5}{6} - \frac{3}{5} = \dots$$

- a) $\frac{7}{30}$ b) $\frac{8}{30}$ d) $\frac{9}{30}$ c) $\frac{1}{3}$

- 5) The equivalent fraction of $\frac{12}{15}$ is
 - a. $\frac{2}{5}$ B. $\frac{3}{4}$

- $d)\frac{1}{3}$

6)
$$2 \frac{3}{4} + 1 \frac{2}{3} = \dots$$

- a) $3\frac{5}{12}$

- d) 4



4. Answer the following:

1) Salma bought $3\frac{1}{2}$ kg of tomato, and $1\frac{1}{4}$ kg of onion. How much vegetable did she buy?
2) Basma walked $2\frac{3}{4}$ km on Sunday, and $1\frac{1}{3}$ km on Monday. What distance did she walk in all?
 3) Ali bought a bottle of juice contains $1\frac{3}{4}$ liters of orange juice. He drank $\frac{2}{5}$ liter of juice. How much of juice is left in the bottle?

Revision



1. Answer the following:

Find G.C.F and L.C.M of 12 and 18 by two methods.

A factory produces 875 pieces of cloth weekly. How many pieces did the factory produce daily?

2. Complete the following.

- a) 6(7 + 9) = 42 +
- c) $26,900 \div 43 = \dots$
- d) The common multiple of all numbers is

3. Choose the correct answer.

- (1)20 + 25 =

- a. 2(0+5) b. 5(5+2) c. 5(4+5) d. 20(0+5)
- (2) $13.510 \div 23 = 587R$
 - 9 a.
- b. 8
- c. 7
- d. 6
- (3) Youssef saves 105 LE. Weekly. How much did he save daily?
 - 15 a.
- b. 98
- 735 C.
- d. 112
- From the opposite venn diagram, the expression is (4)
 - 10(6 + 35)a.
- b. 3(10 + 7)
- c.
 - 7(10+3) d. 10(3+7)

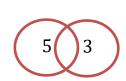


4. Complete the following.

- A. The L.C.M of 5 and 7 is
- B. $8,529 \div 25 = 341 \text{ R}$
- C. The common factor of all numbers is
- D. In the opposite venn diagram the G.C.F is
- E. The divisor in the equation $16,692 \div 52 = 321$ is

5. Choose the correct answer

- (1) is a multiple of any number
 - a. 3
- b. 2
- c. 1
- d. 0
- (2) In the equation $2,150 \div 25 = 86$, the remainder is
 - a. 0
- b. 25
- c. 86
- d. 2,150
- (3) Which of the following are relatively prime numbers?
 - a. 4 and 8
- b. 12 and 18
- c. 2 and 12
- d. 9 and 4
- (4) In the opposite venn diagram the L.C.M is



- a. 0
- b. 1
- c. 15
- d. 8

- (5) 2,574 ÷ 7 =
 - a. 376 R 5
- b. 367 R 5
- c. 367
- d. 376



Unit 2: Rational Numbers

Lesson 1: Counting numbers , natural number & Integer numbers

• Counting numbers: 1, 2, 3, 4, ...

• Natural numbers: 0,1,2,3,4,.....

• Integer numbers :-4,-3,-2,-1,0,1,2,3,4,.....

Negative integer and zero and positive integers

Or negative integers and zero and counting numbers

Or negative integers and natural numbers

Negative integers

The origin

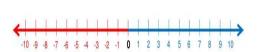
positive integers

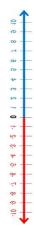


- -The negative integers are to the left of zero .
- the point that represents 0 is called (the origin)
- the positive integers are to the right of zero .
- Representing integers on number line :

1-horizantal number line :

2-vertical number line:







Notes:

- Integer numbers are infinite
- The smallest positive integer is 1.
- The greatest negative integer is -1.
- The number zero neither negative nor positive number.
- Zero is smaller than any positive integer number.
- Zero is greater than any negative integer number.
- 1) chooce the correct answer:
- a. which is an integer?

[-0.2 or
$$\frac{1}{2}$$
 or -10 or $3\frac{1}{2}$]

b. the smallest counting number is

- 2) write an integer to represent each the following situation.
- a. A temperature of 3 degrees below zero . [........]
- b. A bank deposit of 100 L.E. [.......]
- c. A loss of 5 L.E. [.......]
- 3) Represent each of the following numbers on the horizontal number line .
- a. 4, -2, 0, 3, -5

.....

- b. -2, -1, 0, 1, 2
- 4) Represent each of the following numbers on the vertical number line .
- a. 10, -2, -3, 5, 3
- b. -4, -3, -2, -1, 0, 1



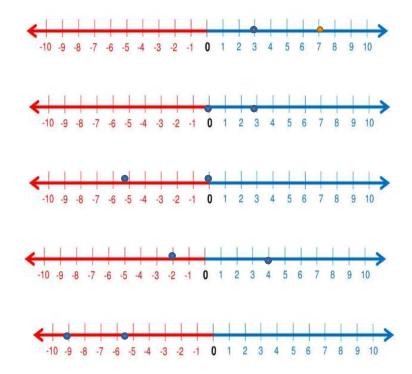
Life situations of integers:

Ex : write an integer to represent each situation :

- 1) The orange juice freezes at 6 c° below zero
- 2) Ahmed walked 5 steps forward
- 3) A building is 12 m high
- 4) Amir diving 7m below sea level

Find the distance between two integer numbers on the number line:

Ex: Find the distance between each two integer numbers on the number line:



Note:

- . the distance between any two numbers is always positive .
- . we can write positive numbers by two ways :

Ex: 2 or +2



1) Which of the following is an integers?

a. -31

b.7.3

c. $-\frac{3}{7}$

d.0

2) complete:

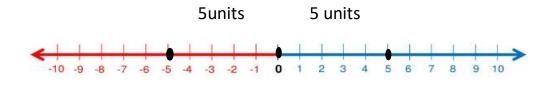
a) the smallest natural number is And the smallest counting number is				
b) the integers between -3 and 2 are				
c) the number is neither positive nor negative .				
d) the integer which just next -4 is				
e) the integer which just before -10 is				
f) the number of integers between -4 and 3 is				
g) the smallest non negative integer isand greatest non- positive integers is				
h) the smallest positive integer number is and the greatest negative integer number is				
3) write an integer to represent each situation :				
a) A temperature is 12°C below zero .	()			
b) she is diving 10m below sea level .	()			
c) Ahmed withdraws 6000pounds from his bank account .	()			
d) the tree is 4m high.	()			
e) 3 steps forward .	()			
f) Abank deposit of 750 L.E.	()			
g) A loss of 20L.E.	()			
h) A gain of 7 kilograms.	()			
i) A profit of 100 L.E.	()			
j) A decrease of 200 L.E.	()			



<u>Lesson 2</u>: the opposite number (additive inverse)

On the number line any two numbers that are at the same distance from zero and on two opposite position of it are called opposites or additive inverse

For example:



opposites or additive inverses

Each of the integers 5 and -5 has the same distance away from 0 therefore 5 and -5 are opposites .

Note that:

- a. The opposite of 5 is -5
- . The opposite of -5 is 5
- . The opposite of the opposite of 5 is -[-5] which is 5
- b. The opposits of 0 is 0

4-Write the opposite of each integers:

- a) -5 b) 6 c) 0
- d) -16...... e) 1000 F) -(-4)

5-write each statement ,filling in each blank with inequality symbol,<or>;

- a) -7...... b) 8......0
- c) 34 d) 2-9
- e) -6...... f) 2-2



6) Which are true? select all the true statements.

- a) A number and its additive inverse are the same distance away from zero on a number line but on opposite sides .
- b) zero is its own additive inverse.
- c) To show 5 and its additive inverse on anumber line count 5 units and plot the point 5 units to the right of 0. then , plot the point 5 units to the left of 0.
- d) The additive inverse of any number is zero .

7) Arrange the following integers from least to greatest:

a) -6, 0, -4, 4, -7, 3

.....

b) 7,-7,-3,-5,11,-11.

.....

8) Arrange the following integers in an ascending order:

- 9) the distance between the number 2 and its opposite on the number line equals units .
- 10) the distance between the opposite of 4 and 0 on the number line equals units .

Lesson 3: Analyyzing Rational number by using models:

What is rational number?

A <u>rational number</u> is any number that can be written in form $\frac{a}{b}$, where a and b are integers and b $\neq 0$

Example : All 5,-3, 0, $3\frac{1}{8}$, 0.28, can be written in the form $\frac{a}{b}$ as :

$$\frac{5}{1}$$
, $\frac{-3}{1}$, $\frac{0}{1}$, $\frac{25}{8}$, $\frac{28}{100}$



Write the following numbers in the opposite venn diagram

$$\frac{3}{4}$$
, 782, 0, -10, -0.5, 15, -6, $7\frac{12}{13}$

Write the given rational number in fraction form $\frac{a}{b}$:

- a. -3
- b.-0.31
- c. $3\frac{3}{9}$
- d.2.5

Note

.Any collection of numbers is called a set as "set as rational numbers "

.Each rational number is called an element of the set of rational numbers.

Match the numbers to the best subset:

Rational numbers	integer	counting	number	natural number				
a.0.785	b. $\frac{2}{8}$	C	c439					
d2	e. 0							
g.5	h. 17266	i	i35					
	Rational numbers							
	Integers		not integers fraction and decimals					
negative integers zero and counting								

Belonging of an element to aset;

We can say that -3 belongs to set of integers but -3 does not belong to set of natural number .



Example:

 $\frac{1}{2}$ belongs to set of rational numbers

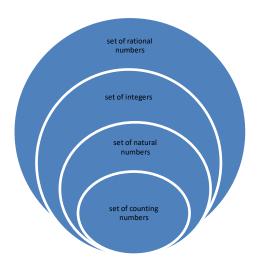
O does not belong to set of counting numbers .

Example:

Write 'belong' or 'does not belong '.

- a .- $\frac{3}{7}$to set of integers.
- b.0.....to set of natural numbers.
- c.-4 to set of counting numbers.
- d. 0to set of rational numbers .

Inclusion and subsets:



Write 'a subset ' or 'not subset '

- a. set of integers isof set of counting numbers.
- b. set of natural numbers isof set of integers .
- c.set of counting numbers isof set of rational numbers .
- d. set of rational numbers isof set of natural numbers .



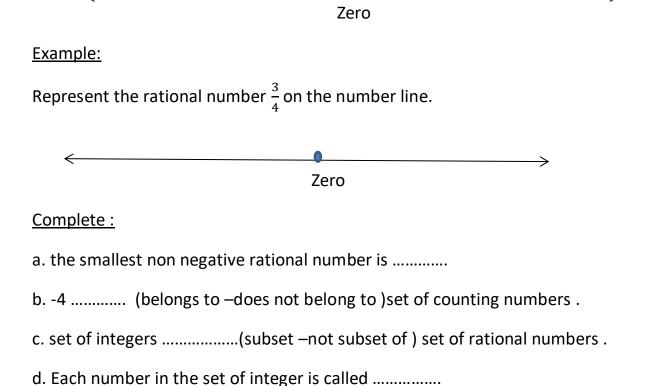
positive rational numbers (+)

Representung the rational number on the number line :

Negative rational numbers (-)

<u>.Each</u> rational number can be represented by a unique point on the number line .

. <u>the positive</u> rational numbers are represented on the number line by points lying on <u>the right side</u> of the point which represents the number zero and and <u>the negative</u> rational numbers are represented by points lying on <u>the left side</u> of the point which represents the number zero and the number zero neither positive nor negative.





lesson 4: comparing and ordering rational numbers.

If the point which represent the number x lies on the left of the point which represent the number y on the number line as shown in the opposite

figure ,then: x<y or y>x



Х

У

Example:- Represent the following rational numbers on the number line, then arrange them ascendingly: $\frac{7}{5}$, zero, $\frac{9}{5}$, 2, -1

-Represent the following rational numbers on the number line, then arrange them ascendingly : 2, zero, $\frac{5}{2}$, -1, $\frac{7}{2}$

Compare the two numbers in each of the following using suitable sign (< . > ,=).

a.
$$\frac{5}{12}$$
, $\frac{7}{12}$ b. $\frac{6}{12}$, $\frac{2}{3}$ c. $\frac{11}{12}$, $\frac{11}{15}$

b.
$$\frac{6}{12}$$
, $\frac{2}{3}$

c.
$$\frac{11}{12}$$
, $\frac{11}{15}$

$$d.\frac{2}{3},\frac{4}{5}$$

g.
$$\frac{11}{2}$$
, 3.2 h. $\frac{1}{4}$, $-\frac{5}{6}$

h.
$$\frac{1}{4}$$
, $-\frac{5}{6}$

Compare each the following using suitable sign (< . > ,=).

$$a.\frac{3}{6}.....\frac{2}{3}$$

$$a.\frac{3}{6}......\frac{2}{3}$$
 $b. -\frac{7}{5}......\frac{4}{5}$ $c. \frac{1}{5}......\frac{1}{6}$

$$c. \frac{1}{5} \dots \frac{1}{6}$$

d.
$$\frac{4}{10}$$
 $\frac{14}{35}$ e. $\frac{10}{15}$ $\frac{2}{3}$ f. $-\frac{3}{4}$ $-\frac{2}{4}$

e.
$$\frac{10}{15}$$
 $\frac{2}{3}$

$$f. - \frac{3}{4} \dots - \frac{2}{4}$$

Write the correct sign (<,>,=).

a.
$$-\frac{1}{2}$$
 zero

b.0.8 1 c.
$$-1.6$$
 $-\frac{8}{5}$

e.
$$\frac{3}{2}$$
 $\frac{1}{2}$

d. 3.7 3.65 e.
$$\frac{3}{2}$$
 $\frac{1}{2}$ f. $\frac{1}{4}$ $\frac{1}{6}$

g.-
$$4\frac{1}{2}$$
.........- $\frac{3}{2}$ i. 0.5....... $\frac{2}{8}$

$$h.-\frac{5}{7}.....-\frac{3}{2}$$

i.
$$0.5............\frac{2}{8}$$

$$k.-\frac{3}{4}.....\frac{1}{4}$$



<u>Order rational numbers</u> order the given set numbers from least to greatest, using a table like the one shown.

2.1	1.4	-3 ¹ / ₄	$-1\frac{7}{9}$	$-2\frac{1}{2}$	
		4	Ö	Z	

Least	greatest		

.order the given set of numbers from greatest to least ,using table like the one shown .

3.4	-2 ¹	0	-1 ³	3 -	
	⁻ 2	•	⁻ 7	4	

greatest		Least



Choose the correct answer.

1)
$$\frac{3}{5}$$
 $\frac{2}{7}$

- a.>
- b.< c.=
- 2) 0.70.65

- a.> b.< c.=
- 3) $-\frac{1}{4}$ $-\frac{2}{9}$
- a.> b.< c.=
- 4) $\frac{2}{8}$ 0.5
- a.> b.<
 - c.=
- 5)is lying between 3.14 and 3.2.
- a.3.15
- b.3.21
- c.3.22
- d.3.20
- 6) 2.8 >
- a.3.1
- b.4
- c.-5.8
- d.7.9
- 7) the smallest number from the following is
- a.0.11
- b.0.3
- c.0.101
- $d.\frac{1}{2}$
- 8) the greatest number from the following is

- a. $\frac{1}{2}$ b. $\frac{1}{3}$ c. $\frac{1}{4}$ d. $\frac{1}{12}$



Lesson 5&6 :- Exploring Absolute value

- Comparing Absolute values

- what is the absolute value?

The absolute value of a rational number is its distance from zero since distance is positive , or zero .

$$|5| = 5$$
 and $|-5| = 5$

Note -
$$|-5| = -5$$

Find the value of each of the following:

d. -
$$\left| -\frac{3}{7} \right|$$

e.
$$|-3| + |5|$$

compare using (<, >, =)

d.
$$\left| -3\frac{1}{7} \right| \dots \left| -3\frac{1}{5} \right|$$



Find the value of each of the following:

I.
$$|0| \times |-3|$$

k.
$$8 \times |-11|$$

Compare using [< , > or =] .

a.
$$|-3|$$
 $|-1|$

d.
$$\left| 9\frac{3}{5} \right| \dots \left| -9\frac{3}{5} \right|$$

e.
$$5\frac{5}{6}$$
 $\left| -\frac{35}{6} \right|$



Find the value of x:

a.
$$|x| = 5$$

e.
$$|x| = 0$$

b.
$$|-4| = x$$

$$f. |-101| = x$$

$$c. |x| = 12$$

g.
$$|-12| = x$$

$$d|3| = x$$

$$h . |x| = 20$$

choose the term that correctly completes the sentences:

$$|2| = |-2|$$

absolute value distance direction

equal negative positive

- a. The symbol in the expression |2|, signifies the distance from 0 to 2.
- b. The symbol in the expression |-2|, signifies the distance from 0 to- 2.
- c. The Sign shows the relationship between each side and that their values are the samefrom 0 .



choose the correct answer

a. |-6|

b. |-7|

c. |-8|

d. |-9|

a. 1.4

b. -1.29

c. -1.4

d. 1.19

3)
$$\left| -3\frac{1}{4} \right|$$
 3.12

a. >

b. <

- c. =
- 4) the absolute values of opposites are
- a. equal

b. different

- c. negative
- 5) A negative number with an absolute value greater than 10
- a. 10

b. 11

c. -9

- d. -12
- 6) The distance between 10 and $\left|-10\right|$ on the number line is unit[s]
- a. 10

b.-10

c. 0

- d. 20
- 7) The absolute value of the opposite of $-2\frac{1}{5}$ is
- a. $4\frac{2}{5}$

b. 0

c. $-2\frac{1}{5}$

d. $2\frac{1}{5}$



- 8) |2| × |-2| =
- a. 0

b. 4

c. -4

- d. -1
- 9) |x|-1
- a.>

b. <

- c. =
- 10) $\left| -2\frac{1}{4} \right| \div \left| \frac{1}{2} \right| =$
- a. $4\frac{1}{4}$

b. $4\frac{1}{2}$

c. $\frac{9}{8}$

d.4

Write the opposite (additive inverse) number of each of the following:

- a. $\frac{3}{7}$ b. $-\frac{2}{5}$ c.0

- d. $\frac{1}{2}$ f. $2\frac{1}{3}$ f. $2\frac{1}{3}$

Represent each of the following rational number on the number line:

a. $\frac{1}{3}$

- b.- $\frac{1}{2}$
- c. $3\frac{1}{4}$
- d.-2.5

Revision on unit 2

Choose the correct answer:

a. -1000

1) the rational number between -3.1 and -3.17 is							
a3.2	b. 3.15		c3.14	d:	3.18		
2) which of the following is greatest number ?							
a10	b. -10	C.	-11	d.	9		
3) the additi	3) the additive inverse of -2 is						
a. 2	b2	c. $-\frac{9}{3}$	d. $-\frac{1}{4}$	2			
4) -3 + -2	=						
a .5	b5	c. 6	d	.0			
5) All integer	rs are also	numbers .					
a. counting	b. na	tural	c. rati	onal			
6) -3	set of natura	al numbers	5.				
a. belongs	b. does not b	elong	c. is a subse	et of	d. is not a subset		
7) the set of	counting numbe	r numbers	te	set of ra	ational numbers		
a.belongs	b. does not b	elong	c. is a sub	set of	d.is not subset of		
8) -8 >							
a. -9	b. -7	c.9	d	. 8			
9) the best subset for of the number -2 is							
a. acounting	number .	b	. an integer				
c. a natural r	number .	(d. a rational	number			
10) the smallest natural number is							

c. 0

b. -1

d. 1



- 11) the integer which comes just before -3 is
- a.-2
- b. -4
- c. -1
- d. 0
- 12) The opposite number of $-\frac{3}{8}$ is
- a. $-\frac{3}{8}$

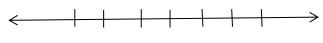
- b. $\frac{8}{3}$ c. $-\frac{8}{3}$ d. $|-\frac{3}{8}|$
- 13) $-\frac{3}{4}$ $-\frac{1}{2}$
- a. >
- b.<
- c. =
- 14) which of the following is an integer?
- a. 3.75

- b. $-\frac{3}{7}$ c. $\frac{7}{7}$ d. $2\frac{1}{2}$

complete the following.

- a) the smallest positive integer number is
- b) absolute values of the opposite are
- c) |-3| x |-4| =.....
- d) the number of integers between -5 and 2
- e) $-3\frac{1}{4}$ in the form $\frac{a}{h}$ is
- f) the integers between -4 and 1 are
- g) A negative number with an absolute value greater than 8 is
- i) from the opposite number line the integer for point A isand its opposite

is



0

-1



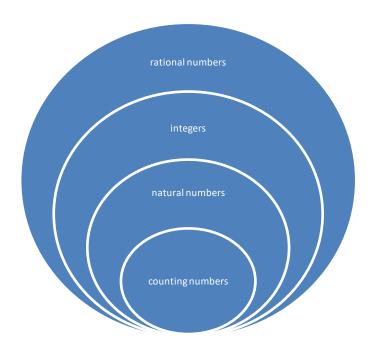


The order is:.....

2) find a rational number lying between $\frac{3}{5}$ and $\frac{2}{3}$

3) write the following numbers in the opposite venn diagram.

34 ,
$$2\frac{1}{4}$$
 , 0.225 , -10 ,0 , $-\frac{7}{8}$



4) Represent $-3\frac{1}{4}$ on the number line.

.....



UNIT 3 ALGEBRAIC EXPRESSIONS

Lesson one: Creating mathematical expressions

Mathematical expressions are sorted into:

Numeric expressions Are statements that contain only numbers separated by one or more operations from $(+, -, \times, \div)$

Examples: 3 + 5.8

Algebraic expressions Are statement contain numbers and symbols (variables) separated by one or more operations from $(+, -, \times, \div)$

Examples :3X + 4Y

1) Classify the following mathematical expressions.

Mathematical expression	Algebraic expression	Numeric expression
9		
2 + 7.8		
3(6) + 2		
7(1.4 + 3.2)		
48 – 1		
$\frac{1}{4}$ m -2		
2n		
3P + 4q		
5X + 3X – 1		
X – 36		
R + s - t		



2) Write numeric or algebraic expression for each of the following:

c)
$$\frac{3}{4}$$
 z (.....)

g)
$$3x - 2x + 3$$
 (.....)

h)
$$6(5-3)+2$$
 (.....)

H.W

Mathematical expression	Algebraic expression	Numeric expression
12 + 5.8		
3K + 4		
8(1.4 – n)		
2(3) + 5		
3p – 4q + 1		
K + 3m –n		



Lesson two: Analyzing mathematical expressions

Contents of mathematical expression:

Term: Is a number, a variable or product of both 2, 5X, 8, 3Z, $\frac{3}{4}$ b, $\frac{5}{7}$

Constant: Is the term that doesn't contain variable 2, $\frac{2}{5}$

Coefficient: Is the number that is multiplied by the variable like 5 in (5X)

Like terms All numerical terms are like 2, 8, $\frac{3}{7}$

Algebraic term of the same variables are like 3X, 5X,9X

1. Complete the following table:

Expression	Number of terms	Like terms
5		
8 + 2		
X + 12		
4n + 2n + 2		
6 + 3X + 3		
M + 3 +2n + 2		
16X + 2X		
8z + 3z + 9		
7X + 7X + 1 + 2X		





2. Complete the following table

Expression	Constant	coefficients
2a + 7 + 4a		
17 + 5 + x		
4x + 7x + 9		
$22 + \frac{1}{3}z + 2y$		
0.2q + 0.6r + 2y		
4a		
3		

3. Complete the following table

Expression	Number of terms	Like terms	constants	coefficients
7a – 4b + 7				
X + X + 4X				
6 - Z + 5				
18				
$\frac{1}{2} n - 2n + K$				
0.4a + 0.1a + 2a				
R				



<u>H.W</u>

Expression	Number of terms	Like terms	Constants	Coefficients
25n				
4n – 5 + 6n				
8z + g + z				
1000				
2m + 5				
K + 3 + 4k				
7				
$\frac{4}{5}$ b +5q – 7h				
8a				
3 + 5				
2 x 4				





Lesson three: Writing Algebric expression

Algebraic expression and written (verbal) expression

Addition	Subtraction	Multiplication	Division
• Add	• subtract	Multiplied by	• Divide
• Sum	• difference	• Times	• quotient
Increased by	decreased by	Product of	• per
More than	• fewer	• Double	divided equally
• Exceeds	diminished by	• Triple	• split into
• Total	• minus	• twice	• fraction
• Plus	• Take away		• ratio of
• In all	Withdraw		• half
• Gain	• Reduced by		• third
• deposit	• Less than		
	Magnitude of increase		

A. Write each of the mathematical expression using Verbal form (words):

- 1) X + 2
- 2) $\frac{12}{X}$
- 3) X 5
- 4) 12x
- 5) XX
- 6) 2m + 7
- 7) 3(m+4)
- 8) 2(X + 5)
- 9)8-3n
- 10) $\frac{1}{2}$ b + 15



B. <u>Select the algebraic expression that represent the verbal expression</u>

Twelve less than three groups of y 3Y - 12

1)
$$12 - 3Y$$

3)
$$Y - 3(12)$$

C. Record all verbal expressions that represent the expression 5 + 2X

- 1) The sum of 2 and 5 multiplied by X
- 2) The product of 7 and X
- 3) The sum of 5 and the quantity 2 times X
- 4) The product of 2X and 5
- 5) The sum 2 times X and 5

D. Record which expressions can be represented by an algebraic expression that contains addition.

- 1) Take 14 away from a number
- 2) Ammar has 7 more tokens than Tamer
- 3) A number increased by 3.5
- 4) Baher put 12 more stickers in the sticker book
- 5) A student shared his oranges equally with his 2 friends

FUTURES EDUCATIONAL SYSTEMS

E. Write an algebraic expression for each of the following verbal expression.

- 1) Add 6 to the number Y
- 2) Subtract 3 from the number X
- 3) Multiply 5 by the number Z
- 4) Divide the number n by 3
- 5) A number less than ten
- 6) A number less ten
- 7) A number less than six
- 8) A number less six
- 9) Nine more than a number X three times a number S
- 10) Product of a number X and 5.4
- 11) Quotient of a number v by 6
- 12) Three fifth a number m
- 13) Nine increased by a number five
- 14) A number Y decreased by 5
- 15) Add 3 to double of the number X
- 16) Subtract 5 from double of the number y
- 17) Twice the sum of a number and 3
- 18) The sum of four times a number and seven
- 19) Add 6 to one third of a number
- 20) 8 decreased by three times a number



F. Choose the correct answer

- 1) If we subtract 5 from the number X we get
 - a) 5X

- b) 5 X
- c) X 5
- d) X + 5
- 2) Suzan saved L.E X and her father gave her L.E 10 she will have
 - a) X 10
- b) X + 10
- c) 10X
- d) 10 X

- 3) Subtracting 3 from double a number =
 - a) N 3
- b) 2n 3
- c) 3n + 2
- d) 5n

- 4) Three times a number less two is
 - a) 3X + 2
- b) 3X 2
- c) 2 ×3X
- d) 2 + 3X
- 5) If three times a number is added to 12, then the algebraic expression that express this is
 - a) q + 12
- b) q 12
- c) 3q + 12
- d) 3q 12

- 6) Twice the sum of a number and five is
 - a) 2Y + 5
- b) 2Y 5
- c) 2(Y + 5)
- d) 2(Y 5)
- 7) Bassem is K years old now, how old will he be after 5 years?
 - a) 5K

- b) 5 ÷ K
- c) K 5
- d) K + 5
- 8) What operations are in the algebraic expression for "twice a number increased by three"?
 - a) + and –
- b) X and –
- c) X and +
- d) + and -

- 9) What verbal expression for 5X 7 is ..
 - a) 5 multiplied by X increased by 7
 - b) 5 times a number X, lesss than 7
 - c) 5 times a number X, less 7
 - d) 7 decreased by 5X

Revision G6

(1)	Choose the correct answer:
1)	In the equation $384 \div 16 = 24$

a. 384

b. 16

c. 24

, the dividend is

d. 0

2) If $40 \div 5 = 8$, then the remainder is

a. 40

b. 5

c. 8

d. 0

3) In the equation 29 ÷ 3 = 9 R2, the divisor is

a. 29

b. 3

c. 9

d. 2

4) If Mona has 17 oranges and she wants to distribute them equally among 3 of her friends, how many oranges are left?

a. 17

b. 3

c. 5

d. 2

5) Which is the correct relation which represents the following statement: (distribute 16 crayons equally among 4 students)

a. 16 × 4

b. 16 ÷ 4

c. 16 + 4

d. 16 - 4

6) The number is a multiple of any number

a. 0

b. 1

c 2

d. 3

7) The common factor of all numbers is

a. 0

b. 1

c. 2

d. 3

8) Which of the following are relatively prime numbers?

a. 4 and 8

b. 12 and 18

c. 6 and 12

d. 9 and 4

9) The G.C.F of 6 and 10 is

a. 2

b. 4

c. 6

d. 15

10) From the opposite Venn diagram the G.C.F =

a. 6

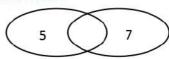
b. 5

c. 42

d. 30

Revision G6

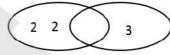
- 11) From the opposite Venn diagram the G.C.F =
 - a. 0
- b. 1
- c. 5
- d. 35



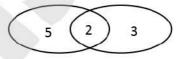
- 12) The L.C.M of 5 and 7 is
 - a. 12
- b. 35

c. 1

- d. 0
- 13) In the opposite Venn diagram the L.C.M =
 - a. 0
- b. 1
- c. 12
- d. 3



- 14) The following Venn diagram represents the prime factorization of the two numbers which are
 - a. 3 and 5
- b. 2 and 3
- c. 2 and 5
- d. 6 and 10

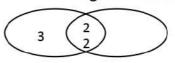


- 15) 20 + 25 =

 - **a.** 5(5+2) **b.** 5(4+5)
- c. 20 (1+5) d. 25 (4+5)
- **16)** 3 (5 + 2) =
 - a. 8 + 5
- b.3 + 7
- c. 15 + 10
- d. 15 + 6
- 17) The expression which represents the opposite Venn diagram is

 - **a.** 4(3+0) **b.** 4(3+1)

 - c. 3(2+2) d. 3(4+0)



- - g g g C
- g g g C C
- g g g C C
- g g g C C
- g g gC
- **a.** 3(2+5) **b.** 2(3+5) **c.** 5(3+2) **d.** 5(5+1)

- **19)** $\frac{2}{3} + \frac{1}{4} = \dots$
- c. $\frac{11}{12}$
- **d.** $\frac{7}{12}$

Revision G6

20) $5\frac{1}{2} + 2\frac{2}{5} = \dots$

a.
$$7\frac{3}{5}$$
 b. $7\frac{9}{10}$

b.
$$7\frac{9}{10}$$

c.
$$\frac{9}{10}$$

d.
$$7\frac{4}{5}$$

21) $\frac{2}{5} + \frac{4}{5} + \frac{1}{5} = \dots$

a.
$$\frac{8}{5}$$

b.
$$1\frac{2}{5}$$

c.
$$\frac{5}{7}$$

d.
$$1\frac{2}{7}$$

22) $\frac{5}{6} - \frac{3}{4} = \dots$

a.
$$\frac{2}{10}$$

b.
$$\frac{3}{5}$$

C.
$$\frac{3}{24}$$

d.
$$\frac{1}{12}$$

23) 6 - $2\frac{1}{3}$ =

a.
$$4\frac{2}{3}$$

b.
$$3\frac{2}{3}$$

c.
$$2\frac{1}{3}$$

d.
$$8\frac{2}{3}$$

24) The number 0 is a number.

- a. Counting
- b. Positive
- c. Negative
- d. Natural

25) The number - 3 is number.

- a. Counting
- b. Natural
- c. Integer
- d. positive

26) Which of the following numbers is a counting number?

- a. 5
- b. 2
- c. 2
- **d**. 0

27) The integer numbers consists of negative numbers and numbers.

- a. Positive
- b. Counting
- c. Natural
- d. Otherwise

28) The smallest positive integer is

a. 0

- b. 1

d. 2

29) The greatest non-positive integer is

- a. 1
- b. 1

c. 0

d. - 2

30) The greatest negative integer is

a. 0

- b. 1

d. 2

Revision G6

31)	Which of the following is an integer					
	a. $\frac{15}{2}$	b. $\frac{15}{3}$	C. $\frac{15}{4}$	d. $\frac{5}{3}$		
32)	Which integer repre A plane flying at an	로 가능하다면 있다. 그리고 있다면 보다 보다는 사람들이 되었다면 보다 보고 있다고 있다면 없다면 보다 보다.		level		
	a. + 425	b. - 425	c. 0	d. Otherwise		
33)	Which integer repre A submarine at a c					
	a. 2	b. 20	c. - 20	d. 2		
34)	An integer included	between - 2 and 3	is			
	a. 5	b 3	c. -4	d. - 1		
35)	The integer which c	omes just before th	e number – 5 is			
	a 4	b 6	c. 4	d. 6		
36)	The number of integ	gers between - 2 ar	nd 2 is	i		
	a. 2	b. 3	c. 4	d. 5		
37)	The distance betwe line equals		nd its opposite o	n the number		
	a. 2	b. - 2	c. 4	d. 0		
38)	The additive inverse	e of – 5 is	i.			
į.	a. 5	b. - 5	c . 0	d. Otherwise		
39)	The additive inverse	of zero is				
	a. 1	b . 0	c. - 1	d. Otherwise		
40)	The sum of any two	opposite numbers	is			
	a. 0	b. 1	c. 2	d. - 1		
41)	Which of the following	ng is the correct sta	atement?←	a b		
	a . a > b	b. a < b	c. b < a	d . a = b		

Revision G6

42) 0.8 0.75

a. >

b. <

d. Otherwise

43) $\frac{3}{5}$ $\frac{2}{3}$

b. <

C. =

d. Otherwise

44) $-\frac{4}{7}$ $\frac{5}{6}$

b. <

C. =

d. Otherwise

45) - 6.25 <

a. - 7.5

b. $-8\frac{1}{2}$

C. 0

d. - 9.15

46) 32 is the set of counting numbers

a. Belong to

b. Not belong to

c. Subset of

d. Not subset of

47) The set of integer numbers is the set of rational numbers

a. Belong to

b. Not belong to c. Subset of

d. Not subset of

48) The number $\frac{2}{5}$ is belongs to the set of the numbers.

a. Natural

b. Counting

c. Integer

d. rational

49) Which of the following is the smallest rational number?

a. - 6

b. $-4\frac{3}{5}$ **c.** -2.35

d. 0

50) The number is lying between 3.15 and 3.2

a. 3.7

b. 3.17

c. 3.1

d. 3.22

51) The number of rational numbers lying between $\frac{2}{5}$ and $\frac{4}{5}$ is

a. 1

b. 2

c. 3

d. An infinite number

52) The point which represents the number $-2\frac{3}{4}$ on the following number

a. e

b. f

C. g

d. h

Revision G6

53) The number $-2\frac{1}{3}$ in the form $\frac{a}{b}$ is

a.
$$\frac{7}{3}$$

b.
$$-\frac{7}{3}$$

c.
$$\frac{3}{7}$$

d.
$$-\frac{3}{7}$$

54) | - 10 | =

55) | 0 | =

56) - | - 3 | - (- 3)

57) |-5| >

58) Which of the following is an algebraic expression?

$$a. 3 + 5$$

b.
$$9 + 8 - 0$$

$$c. 2m + 5$$

$$d. 3 + (2 + 1)$$

59) The number of terms in the algebraic expression 3x + y - 5 is

60) Which of the following are like terms?

a.
$$3x$$
, 3

$$\mathbf{c.} \ x$$
, $2x$

61) Which of the following algebraic expressions has 2 terms?

a.
$$x + 2y - 7$$

b.
$$5x - 1$$

62) The constant in the expression 3m + n + 2 is

63) The coefficient in the algebraic expression 3x + y + 2 is

64) If we subtract 3 from the number , the expression is

b.
$$x - 3$$

c.
$$3 - x$$

d.
$$x + 3$$

Revision G6

65) Subtracting 5 from double of a number =

- **a**. 5 b
- **b.** 2b 5
- c. 5 2b

d. b - 5

66) The algebraic expression of "three times a number added to 14" is

- **a.** 3x + 14
- **b.** 3x 14
- c. x + 14

d. x - 14

67) Twice the sum of a number and 3 is

- **a.** 2y + 3
- **b.** 2(y+3)
- **c.** 2y 3

d. 2(y-3)

68) Elias saved x L.E and his father gave him 10 L.E , he will have

- a. 10x
- **b.** x 10
- c. 10 x

d. x + 10

69) Adam is x years old. How old was he before 5 years?

- \mathbf{a} . 5x
- **b.** 5 x
- **c.** x 5

d.5 + 10

70) The verbal expression of 3x - 5

- a. 3 multiplied by x increased by 5
- **b.** 3 times a number x, less than 5
- c. 3 times a number x, less 5
- **d**. 5 decreased by 3x

(2) Complete:

1) The quotient in the equation: 438 ÷ 5 = 87 R3 is

2) The common factor of all numbers is

- **3)** 6 (2 + 4) = 12 +
- 4) The G.C.F of 3 and 5 is
- 5) The opposite of zero is
- 6) The smallest counting number is
- 7) The greatest negative integer is

8) The smallest non-negative integer is

9) $5-2\frac{1}{4}=$

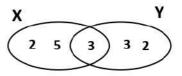
10) The opposite of I - 2 I =

Revision G6

11)	If $I \times I = 5$, then $X =$ or
12	- 2 × 2 =
13	
14	The number of terms in the algebraic expression $5x + 3$ is
15	The constant in the expression $5x + 3y + 4$ is
16	The coefficient in the algebraic expression $5m-3$ is
17	The algebraic expression of " the quotient of a number x by 2 " is
18	The algebraic expression of " twice the sum of a number and 5 " is
19	The verbal expression of " $4 + x$ " is
20	The verbal expression of " $2m-5$ " is
HERE!	Answer the following: A factory produces 945 bottles of juice weekly. How many bottles did the factory produce daily?
2)	Use Venn diagram to find: G.C.F and L.C.M of 12 and 18
3)	Ahmed has 8 oranges and 12 bananas. He wants to make baskets with the same number of each fruit in each basket.
	a. what is the greatest number of baskets he can make? b. write the expression which represent that.

Revision G6

- 4) From the opposite Venn diagram:
 - **a.** The value of x =
 - **b.** The value of Y =
 - c. The G.C.F =
 - **d.** The L.C.M =



5) Salma bought $3\frac{1}{2}$ kg of tomato, and $1\frac{1}{4}$ kg of onion. What is the total mass of vegetable that salma bought?

.....

6) Arrange the following in descending order:

2 , -4 , -8 , 7 , 0

7) Arrange the following from the least to the greatest:

3.5 , $6\frac{1}{2}$, -1 , -2.5

......

8) Write two rational numbers lies between: $\frac{1}{3}$ and $\frac{4}{5}$

9) Write the algebraic expression which represent:

Subtract 5 from the half of the number x

......

10) Write the verbal expression which represent: 3 (n + 5)

Answer guide G6

1) Choose:

- 1) a 11) b 21) b 31) b 41) b 51) d 61) b
- 2) d 12) b 22) d 32) a 42) a 52) a 62) b
- 3) b 13) c 23) b 33) c 43) b 53) b 63) b
- 4) d 14) d 24) d 34) d 44) b 54) c 64) b
- 5) b 15) b 25) c 35) b 45) c 55) a 65) b
- 6) a 16) c 26) b 36) b 46) a 56) b 66) a
- 7) b 17) b 27) c 37) c 47) c 57) d 67) b
- 8) d 18) c 28) b 38) a 48) d 58) c 68) d
- 9) a 19) c 29) c 39) b 49) b 59) c 69) c
- 10) a 20) b 30) c 40) a 50) b 60) c 70) c

2) Complete:

- 1) 87 6) 1 11) 5, -5 16) 5
- 2) 1 7) -1 12) 4 17) $x \div 2$
- 3) 24 8) 0 13) 5 18) 2(x+5)
- 4) 1 9) $2\frac{3}{4}$ 14) 2 19) The sum of x and 4
- 5) 0 10) -2 15) 4 20) 5 less than the double of a number m

3) Essay:

1) The number of bottles = 945 ÷ 7 =135 bottle

$$12 = 2 \times 2 \times 3$$

 $18 = 2$ $\times 3 \times 3$ 12 18 $8 = 2 \times 2 \times 2$
 $12 = 2 \times 2 \times 3$

2) G.C.F =
$$2 \times 3 = 6$$
 3) G.C.F = $2 \times 2 = 4$

- 4) a. 30 b. 18 c. 3 d. 180
- 5) The total mass = $3\frac{1}{2} + 1\frac{1}{4} = 4\frac{3}{4}$ kg 6) 7, 2, 0, -4, -8 7) -2.5, -1, 3.5, $6\frac{1}{3}$
- 8) $\frac{6}{15}$, $\frac{7}{15}$, $\frac{8}{15}$ 9) $\frac{1}{2}x - 5$

a. 4

b. 4(2+3)

10) Three times the sum of the number n and 5

L.C.M = $2 \times 2 \times 3 \times 3 = 36$

Unit 1

Lesson 1: using long division in the real wourld

Ex1: divide using the standard division algorithm

Ex2: A hotel consists of 13 floors and each floor contains 325 rooms how many rooms are there in this hotel?

•••••••••••••••••••••••••••••••

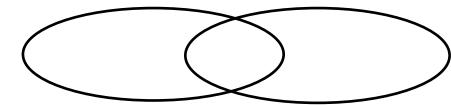
Ex3: Ali and his friends collected 216 pounds to distribute to the poor, if this amount was distributed to 18 people, How much was the share of each person?

Lesson 2: factorize the number into its prime factors

Ex: use venn diagram to find (G.C.F) and (L.C.M) of each of the following:





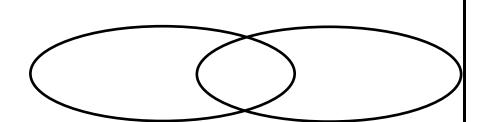


L.C.M =

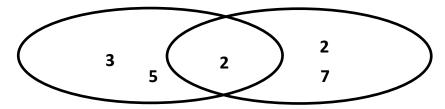








Ex: using the following diagram, complete:



1) the two numbers represented in the venn diagram are

And

2) the common prime factors of the two numbers are

3) the G.C.F for the two numbers is

4) the L.C.M for the two numbers is

Lesson3: writing expressions using G.C.F **Ex 1:** complete the following a) 5 X (7+5) = (5 X.....) + (..... X2) b) 2 X (..... +.....) = (...... X 3) (..... X 5) c) the G.C.F for 15 and 18 is d) the G.C.F of all numbers is **Ex 2:** use the G.C.F to write the numerical expressions of each of the following a) lina has 6 oranges and bananas what is the largest number of bags that can be made so that all bags include the same numbers of items? b) the students collected 30 boxes of cheese and 40 bags of legumes what is the largest number of baskets of food that can be prepared with out any food left?

Lesson 4: factorize the least common multiple

Ex)find the result

a)
$$\frac{3}{5} + \frac{1}{5} = \dots$$

b)
$$\frac{1}{5} + \frac{1}{2} = \dots$$

c)
$$\frac{1}{4} + \frac{1}{12} = \dots$$

d)
$$\frac{5}{6} - \frac{1}{2} = \dots$$

e)
$$1 + \frac{2}{9} = \dots$$

f)
$$\frac{3}{4} + \frac{2}{3} = \dots$$

g)
$$2\frac{1}{3} + 1\frac{1}{2} = \dots$$

h)
$$3\frac{1}{3} - 1\frac{2}{3} = \dots$$

$$i)\frac{2}{5} + \frac{1}{3} = \dots$$

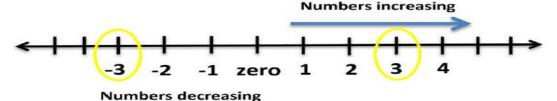
Unit 2

Lesson 1

Exercise1:

Write an integer to represent each of the following situations:

- 1) the value of the profit is 25 Egyptian pounds. (.....)
- 3) the temperature is 10 degrees below zero. (.............)
- 4) building height 12 meters. (.....)
- 5) the drop is 19 m. underground. (.....)
- 6) move 4 steps back. (.....)



Exercice2: write the numbers indicated by the symbols shown on each of the horizontal number line and the vertical number line:

a.....

b.....

C.....

e.....

f.....

g.....

←	_	+	_	+	_	-	_	-	+	+	+	+	→
					' -1								
	K	-4	-3	ı	-т	а	C		3	IJ	5	C	

Lesson 2

Put (> ,< , =):

$$\bigcirc$$

$$\bigcirc$$



0

Find the inverse (opposite):

5

0

Choose the correct answer:

a) the number -3 is located to the right of the number on the number line .

(4 or 4 or 2 or 12)

b) the inverse of -12 is the number

(12 or 12 or 1 or 2)

c) the number is neither a positive nor a negative number. (0 or 1 or 1 or 10)

Lesson 3

Classify all the following numbers according to the number groups shown:

	counting	natural	integers	Rational
5				
0				
-7				
3.5				
$\frac{3}{5}$				
5				

Example 1: Write the following rational numbers in fraction form:

A) 0.75

(b) -45

c) 4

d) 0

e) $3\frac{1}{5}$

f) -1.5

find the opposite number (additive inverse) of each of the following

1- - 0.8 2- $-\frac{3}{4}$ 3- 6.3

4- 2.5 5- 0 6- 3¹/₇

Put (< , > , =):

$$\frac{2}{5}$$
 $\frac{3}{5}$

$$-\frac{6}{7}$$
 $\frac{7}{7}$

$$\frac{2}{5}$$
 $\frac{3}{5}$ $-\frac{6}{7}$ $\frac{7}{7}$ $-\frac{2}{7}$ $\frac{3}{4}$

$$\frac{3}{8}$$
 $\boxed{}$ $\frac{3}{5}$

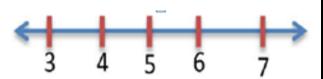
$$\frac{3}{8}$$
 $\boxed{ }$ $\frac{3}{5}$ $-\frac{2}{5}$ $\boxed{ }$ $\frac{2}{3}$ $\boxed{ }$ $\frac{1}{3}$

$$\frac{2}{7}$$
 $\frac{1}{3}$

 $-5\frac{1}{5}$, 2.2 , $-5\frac{1}{4}$, -5.5 , $2\frac{3}{4}$

Example: identify the following numbers on the number line:

 $6\frac{3}{4}$ Is lie between the numbers.....



1 Is lie between the numbers.....



	2.5	- 0.8	5	- 3 1	2 <u>3</u>
<u>a</u> b					
The inverse					

Find the value of each:

$$|-\frac{3}{4}| = \dots$$

$$|-\frac{3}{4}| = \dots$$

$$17\frac{3}{5}$$
 | =

Put (< , > , =):

$$|-8.2|$$
 -7.9 $|-\frac{8}{3}|$ $|2\frac{2}{3}|$

$$-3\frac{4}{5}$$
 $\left[-\frac{3}{2} \right]$ $\left[-9 \right]$

Ex: Arrange all of the following:

Ascending

descending

Ascending

Find each of the following:

$$|-5| = \dots$$
 $|\frac{7}{9}| = \dots$ $|0.03| = \dots$

$$|6| = \dots$$
 $|7.04| = \dots$

Ex: Complete all of the following

I) If I a I = 5, then
$$a =$$

2) If it is
$$I-7I = b$$
, then.....

3) If
$$n = 191$$
, then $n = ...$

Put (< , > , =):

$$|-\frac{8}{3}|$$
 $|2\frac{2}{3}|$ $|3\frac{1}{4}|$ $|-7\frac{2}{5}|$

$$4\frac{3}{4}$$
 | $12\frac{2}{3}$ | 13.4 | $1-3.4$ |

Unit 3

Lesson 1:

1) classify the following mathematical expressions into numerical expressions or algebraic expressions:

Numerical expression	Algebraic expression (
	symbolic)

2) write an algebraic expression for each of the following:
a) if Bassem is x years old now , how old will he be after 5 years ?
B) suzan saved y L.E. and her father gave her L.E. 10 how much money suzan have?

Lesson 2:

1) determine the number of terms and like terms for the following algebraic expressions:

Mathematical	Number of	like terms
expression	terms	
6		
5m+3m+2		
7+9x+9		
X+3+2y+2		
4+8		
5n+2n+10		

2) determine the constants and coefficients in each of the following algebraic expressions:

Mathematical	constants	Coefficients		
expression				
16+3+y				
5				
$20 + \frac{1}{4}x + 3y$				
6a+2+3a				
0.7 q + 0.2 r +0.8 m				

3) in the following algebraic expression ,
10x+20x+25
Determine:
a) number of terms:
b) like terms:
c) constants:
d)coefficients:

- 1) write each of the following algebraic expression in verbal expression
- a) m + 8
- b) x 10
- c) v ÷ 4
- d) 3Y
- e) $\frac{Z}{2}$
- 2) write the algebraic expression for each of following verbal expression
- a) the sum of 3 and 5 multiplied by X
- b) the product of 2 and y
- c) the product of 4 X and 2
- d) the sum of 5 and the quantity 2 times C

Unit (1) Assessment

[1] Choose the correct answer:

- (1) If $384 \div 16 = 24$, then the dividend is
 - **a** 384
- **b** 16
- **C** 24
- **(1)** 0

- (2) If $40 \div 5 = 8$, then the remainder is
 - **a** 40
- **b** 5
- **G** 8
- **d** 0

- (3) If $29 \div 3 = 9$ R2, then the divisor is
 - **a** 29
- **b** 3
- **G** 9
- **d** 2

- (4) The GCF of 6 and 8 is
 - **a** 1
- **b** 2
- **C** 3
- **d** 4

- (5) The common factor of all numbers is
 - **a** 0
- **b** 1
- **G** 2
- **d** 3
- (6) The GCF of any two relatively prime numbers is
 - **a** 0
- **b** 1
- **G** 2
- **d** 3
- (7) The common multiple of all numbers (except zero) is
 - **a** 0
- **b** 1
- **G** 2
- **d** 3



[2] From the opposite Venn diagram, Complete:

- (1) The GCF of the two numbers is
- (2) The LCM of the two numbers is
- (3) The first number is
- (4) The second number is



[3] Essay Problems:

- (1) Salma bought $3\frac{1}{2}$ kg of tomatoes and $1\frac{1}{4}$ kg of onions. How many kilograms of vegetables did she buy?
- (2) Ali bought a bottle of juice contains $1\frac{1}{2}$ liters. He drank $\frac{2}{5}$ Liters. How many liters of juice were left?



Unit (2) Assessment

[1] Choose the correct answer:

- The number -7 is located to the right of the number on the number line.
 - **a** -8
- -6
- **d** 6
- The number is neither negative nor positive. **(2)**
- **(b)**
- **d** 10

- The smallest non-negative integer is
 - **a** -1
- **b** 1
- **C** 100
- **(1)**

- (4) -0.3 = (in the form $\frac{a}{b}$)

- $\frac{-3}{10}$

- **(5)** |-3.7| =
 - **a** 3.7
- **b** 37
- **C** -3.7
- **d** -37

- The absolute value of zero =
- 10
- 0
- \mathbf{G} -1

[2] Complete:

- (3) The greatest non-positive integer is
- (4) The smallest positive integer is
- (5) The integer that represents 7 °C below zero is
- (6) The integer that comes just after -8 is
- (7) If |a| = 8, then a = or
- [3] Order the given set of numbers from least to greatest:



- [4] Complete using (<) , (>) , or (=):
 - **(1)** -3.8

2 5

- -1.8
- (2) $-3\frac{7}{8}$

- (4)
- -0.4
- (5) |-2.5|
- |-3.6

Unit 3 Concept 1

[1] Choose the correct answer:

(1) The algebraic expression $\frac{1}{5}$ k consists of factors.

a 1

() 2

G 3

d 4

(2) In the algebraic term 9 z y^2 the coefficient =

a 9

() 2

G 3

d 4

(3) The algebraic term -5 x z has Factors.

a 1

(b) 2

G 3

d 4

(4) The number of terms that make up the algebraic expression (5 m + 2 n - 9) is

a 1

b 2

G 3

d 4

(5) The like terms in the algebraic expression (5 m + 2 n - 9 m + 2) are

a 2n,2

b 5 m, - 9 m

G 5 m, 2 n

d nothing



[2] Complete:

(1) The algebraic factor in the term 8.5 k² is

(2) The coefficient of algebraic term 5 x² y is

(3) The number of terms and the algebraic expression 3 m − 2 n + 8 is

(4) Like terms in the algebraic expression 3 a + 2 b - 5 a + 9 are

(5) The constant in the algebraic expression 5 k + 8 is

(6) The number of variables in the algebraic expression 3x y +2 z +5 m is

(7) The coefficients in the algebraic expression 5 k + 3 m - 8 are

(8) Two numbers the sum of them is 10 if first one is "x" so the second one is

(9) Ahmed and Tamer have 60 pounds if Ahmed has "x" pounds, then Tamer has pounds.





Q1: Choose the correct answer:

1)	If $384 \div 16 = 24$, then the dividend	is								
	(348	3	or	16	or	24	or	0)
2)	Farida made 47 cookies which she	will o	distr	ibute	equa	lly in	tiny s	glass		-
•	jars. If each jar is to contain 6 cook					-			t	
	be placed in a jar?		,					2022 200 7 0	<i>50</i> .	
	be placed in a jar.	1	47	or	5	or	6	or	7	١
21	Murad has 120 gravens distribute t	hom	171170	100 00 000	W253855 No	10000000000000000000000000000000000000		T.	•	,
3)	Murad has 120 crayons distribute t	nem	alli	orig o	OI III:	Sinei	ius, i	IOW		
	many crayons are left?		_		_				•	,
		(0	or	1	or	2	or	3)
4)	The common factor of all numbers	is								
		(0	or	1	or	2	or	3)
5)	The greatest common factor of 6 ar	nd 8	is							
		(4	or	1	or	2	or	3)
6)	The common multiple of all factors	is								
:50		(0	or	1	or	2	or	3)
7)	The following Venn diagram repres	ents	the	prime	e fact	orizat	ion c	of two		
•	numbers which are			V			_	><		\
	(3 and 5 or 2 and 3 or 2 and	15	or	6 an	d 10	1	5 (2) 3	
	YALIVICE		V/	10,	JIX	1	5 (() 3	
8)	The G.C.F of any two prime numbe	rs is	E,4	CH	ER			<u> </u>		_
	T [1 : 0 1 0 0 3	- 6	0	or	_ 1	or	2	or	3)
9)	The following expression represent	s the	gre	eatest	num	ber o	f bag	s can		1877
: = 0	be made from potatoes and carrot						_			
				-	-		-			

(6 or 36 or 18 or 9 10) The following expression represents the greatest number of bags can be made from mangos and bananas respectively, then the number of all bags is

(4 or 9 or 6 or 36)

then the total number of carrots in all bags is



- 11) The following expression represents the greatest number of baskets water and juice bottles respectively: $(10 \times 3) + (10 \times 5)$, then the number of all bottles in each basket is
 - or 8 or

13)
$$2\frac{3}{4} + 1\frac{2}{3} = \dots$$

$$(3 \frac{5}{12} \text{ or } 4 \frac{5}{12} \text{ or } \frac{17}{12} \text{ or } 4)$$

15) Ahmed saves 45 L.E weekly, After how many weeks will he save 720 L.E?

16) Which of the following are relatively prime numbers?

$$(2(0+5) \text{ or } 5(5+2) \text{ or } 5(5+4) \text{ or } 20[0+5])$$

18) From the opposite venn diagram, the expression is

22) The LCM of two relatively prime numbers is

23) 8 and are two relatively prime numbers.

24)
$$x (5 + 1) = (7 \times 5) + (7 \times 1)$$



Q2: Complete the following:

- 1) If 6,048 ÷ 24 = 252, then 24 x 252 =
- 2) The number which if we divided by 34, the quoient will be 102, and the remainder is 11, is
- 3) The smallest prime number is
- 4) The smallest odd prime number is
- 5) The only even prime number is
- 6) The prime factors of 15 are
- 7) The least common multiple of the two relatively prime number is
- 8) The greatest 2-digit prime number is
- 9) The prime number has only factor(s).
- 10) All prime numbers are odd exceptis an even number.
- 11) The common multiple of all numbers is
- 12) The common factor of all number is
- 13) A number whose prime factors are 2,3,7 is H.E.R.
- 14) Prime factors of 24 are 0 0 3 7 8 0 8 5 7
- 15) The GCF of two prime numbers is
- 16) 5 x (...... +) = (........ x 2) + (....... x 4)
- 17) $2\frac{1}{3} + 1\frac{1}{4} = \dots$
- 18) $1\frac{2}{3} = 2\frac{1}{4}$
- 19) $3\frac{1}{2}$ = $1\frac{3}{8}$

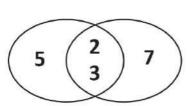


Q3: Answer the following:

- 1) Ahmed has 1,378 oranges and need to pack them up equally in 25 boxes. How many oranges in each box?
- 2) A primary school is planning to a trip to the museum. There are 464 students. If each bus has 45 seats, how many buses will be needed to fill all the students?
- 3) The students collected 20 boxes of cheese and 40 bags of legumes. What is the largest number of baskets of food that can be prepared without any food left?
- 4) Karim 48 pencils and 18 crayons. What is the numerical expression of the greatest number of sets that can be made so that all sets include the same number of items?

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- - The common prime factors of the two numbers are
 - The GCF of the two numbers is
 - The LCM of the two numbers is
 - Are the two numbers relatively prime number? (Yes or No)

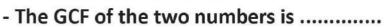




UNIT (1)

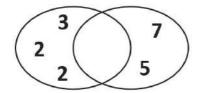
Grade 6 October Rev

- 6) The two numbers represented in the venn digram are and
 - The common prime factors of the two numbers are



- The LCM of the two numbers is
- Are the two numbers relatively prime number?

(Yes or No)



- 7) Nour prepared bags contain snacks. She has 6 oranges and 18 pieces of fruit, Nour wants the snacks in bags to be distributed evenly without any food left. How many bags of snacks can Nour Prepare?
- 8) Murad bought a pen for $9\frac{1}{2}$ pounds, a ruler for $5\frac{1}{4}$ pounds, and a notebook for 4 pounds.

 How much did Murad pay?
- 9) Find GCF and LCM of 12 and 18 by factorization.

AHMED NASSR

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- 10) Use venn digram to find GCF and LCM of :
 - a) 15 and 10
 - b) 27 and 4



Q1: Choose the correct answer:

1) T	Γhe number -3 is number.	
	(positive or Negative or integer or counting)
2) V	Which of the following is a counting number.	
	(0 or -5 or 6 or -7)
3) T	The smallest non-negative integer is	
	(1 or -1 or 0 or -10)
4) T	The greatest negative integer is	-
-	(1 or 0 or -1 or -10)
5) T	The integer numbers consist of negative numbers andnumbers.	
essay Visia	(positive or natural or counting or otherwise	_
6) A	An integer included between -4 and 2 is	,
)
7) T	The integer which comes just before -6 is	,
,)
8) T	The integer which comes just after -11 is	,
٠, .)
9) T	The number of integers included between -2 and 4 is	,
٠, .)
10)	The number of integers on the number line is	,
10,		٠,
11)	IVIAIIIEIVIAIIGO IEACIIEN	, ,
,	-5 is located to the right of the number on the number line.	١.
12)		,
12)	(1 or -1 or 0 or -10	
12\	The additive inverse of -12 is	,
13)		١.
111)
14)	The opposite of 5 >	
1 - \	(-6 or 4 or -4 or 6)
15)		
	(equal to or less than or greater than or otherwise	1

UNIT (2)

Grade 6 October Rev

16) The largest non-positive integer is (1 or -1 or 0 or -100) 17) The number -2.5 is a/an number. (counting or integer or rational or natural) 18) The sum of any two opposite numbers is 1 or 2 or 0 or -1) 19) Ahmed deposit of 500 L.E in the bank represents as (500 or -500 or 50 or -50) 20) Which of the following is closer to the zero? (-7 or -4 or 2 or 5) 21) The smallest counting number is (1 or 0 or -1 or -10) 22) All integers are numbers. (counting or <u>natural</u> or even <u>or</u> rational) 23) $-2\frac{3}{4}$ is between the two whole numbers. (2,3 or 1,2 or -2,-3 or -1,-2) 24) The set of integer numbers the set of rational numbers. (belong to or not belong or subset to or not subset to) 25) The set of integer numbers the set of counting numbers. (belong to or not belong or subset to or not subset to) (belong to or not belong or subset to or not subset to) 27) 0 the set of counting numbers C H E R (belong to or not belong or subset to or not subset to)
28) The set of counting numbers the set of natural numbers. (belong to or not belong or subset to or not subset to) 29) $\frac{5}{6}$ the set of rational numbers. 30) -2 <u>5</u> in a form of <u>a</u> is written as $(\frac{11}{3} \text{ or } \frac{-25}{3} \text{ or } \frac{-11}{3} \text{ or } \frac{-7}{3})$ 31) The set of rational numbers the set of natural numbers.

(belong to or not belong or subset to or not subset to)



32) The opposite of -4 is	2								
эт, то эррэжээ эт түй түй		or	-4	or	0	or	other	wise)
33) -2 x 10 =					_				,
(20	or	-20	or	2	or	other	wise)
34) The distance between -4 and	d its o	pposit	e on	the n	umbe	er line	is	unit(s	s).
		(ze	ro	or	4	or	8 or	-8)
35) The larger absolute value, th	ne	z	ero.						
(closer to or	fart	her to	or	equ	ual to	or	other	wise)
36) The absolute value of 6.3 is				-					
			or	-3.6	or	3.6	or	-6.3)
37) If x = 5, then x =	,								•
31, 11, 11, 11, 11, 11, 11, 11, 11, 11,		(-5	or	0	or	5.	-5 or	5	١
38) The distance between the o	nnosi						3 01		,
so, me distance servicen me o	ppos						-4 or	Q	١
39) The smallest number from t	he fo					01	T 01	U	,
33) The smallest number from t	110 10					· / 2	or	15	١
40) The best subset of the numb	or '	NO.700			L	,, 2	. 01	-13	,
				/ no	+		60111	atina	`
(rational o			OI	110	iturai	ı oı	Coul	ltillig	,
41) is lying between 3.3				21		2 20		2 22	
A L IN A		5 or						3.22)
AHIVI	EL) []	3	551	7 4				
42) The number of rational num MATHEMAT	bers	betwe	en —	— an	a —	— IS .		· · ·	
WATTILIVIAT	16		7410	IVL	/QI	2	OI III)
43) The number of integer number	0 3.	78	0 8	3 53	7	. 16			
43) The number of integer number	oers I	ying be	etwee	n — 5	= an	d 5	– is	••	
				•		•			220
							or in	finite)
44) The number of integer number	bers l								
		(3	or	0	or	2	or in	finite)
45) A negative number with an	absol	ute val	ue gr	eater	than	13 is	•••••		
		(10	OI	r -9	0	r 1	7 or	-14)
46) -8 >				3					
		(-9	or	-7	or	9 or	8)
			. 5%	(4)					



Q2: Complete the following:

- 1) The smallest positive integer number is
- 2) The number of integers between 5 and 2 is
- 3) The integers between 6 and 2 are
- 4) Thesmallest counting number is
- 5) The additive inverse of 5 is
- 6) The number just come after 6 is
- 7) The number just come before 9 is
- 8) The rational number 6.25 is lying between two whole numbers and
- 9) Opposite numbers on a number line have the absolute values.
- 10) $-\frac{3}{5}$ in the decimal form is
- 11) [-5] =
- 12) - 3 =
- 13) 6 in form of fraction is
- 14) The best subset of number 0 is
- 15) Integers between 3 and 2 on the number line are
- 16) The integer that express "move forward 6 steps" is
- 17) 5 is located to the left of the number A.C... on the number line.
- 18) If x = 7/5 then; x €...1...0or()...3...7 8 0 8 5 7
- 19) 0 to set of rational numbers.
- 20) $\frac{15}{5}$ to set of counting numbers.
- 21) set of rational numbers to set of integer numbers.
- 22) Set of counting numbers to set of natural numbers.
- 23) The smallest non-negative integer is
- 24) The greatest non-positive integer is
- 25) The number 1.5 in fraction form is



Q3: Answer the following:

1) Arrange the following in ascending order:

The order:,,

$$3 , -\frac{7}{2} , \frac{5}{2} , \frac{3}{4} , 0 , -11$$

The order:,,,

2) Arrange the following in descending order:

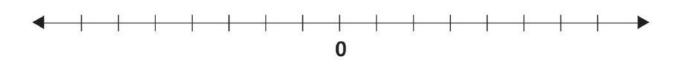
7.5 ,
$$-2\frac{1}{3}$$
 , $-\frac{8}{9}$, $|-1|$, $|-3.5|$

The order:,,,

$$-1\frac{1}{3}$$
 , $2\frac{1}{2}$, $-4\frac{1}{2}$, $-\frac{3}{4}$, $1\frac{1}{2}$

- 3) Write two rational numbers lying between each of the following pairs of numbers:
 - 1) 5.1 and 5.2
 - 2) $\frac{2}{3}$ and $\frac{4}{5}$ AHMED NASSR
 - 3) 2.5 and 2.6 THEMATICS TEAC
- 4) Locate each of the following points on the number line:

Point	Α	В	С	D	E	F	G	н
Number	5	0	-2	3	-1	1	-4	2



UNIT (3) CONCEPT (1)

Grade 6 October Rev

Q1: Choose the correct answer:

1) Which of the following is an	algebraid	expre	ssion?					
(44 - 3 x 4	or	3 + 5	or	4m +3	or	2 +	3 - 1)
2) The coefficients in the algerl	oraic expi	ression	5 + 3y	+ 2k - 9	are	•••••	••••	
(5, 9	or 3,	2 or	3, 2,	5, 9	or	othe	rwise)
3) 3 + 5() + 7, complete to	get a nui	meric e	xpressi	ion.				
	(a	or	k	or 7	+ 3	or	b + c)
4) Which of the following are li	ke terms	?						
(25,	32 or	ab,	da o	r ab,	aq	or	l, m)
5) The constant in the expressi	on 3y + 5	is		/				
	(3	3 or	3у	or	3y + 5	or	5)
6) The number of terms of the	expression	on: 5 - 2	2m - 3n	1 + 4 is	,	• • • • • • • • • • • • • • • • • • • •		
	(5	or -	2 or	- 3	or	4)
7) In the algebraic expression:	5x - 4 + 5	im + 3,	the tw	o like te	erms a	re	•••••	
(3 and 5m or	3x and 5	m oi	7 3 a	nd - 4	or	5x a	and 3)
8) Twice the difference of a nu								
(△2y+5						2 (y - 5))
9) Eslam is x years old now , ho				The second second				
MATHEMAT	2000 Carrier Carrier				(+6	or	x - 6)
10) Ahmed now y years old. ho	wold wa	is he 3	years a	go?				a
	Self-		250	-		or	y - 3)
11) A square of side length "m"		-						167
	m ÷ 4				+ 4	or	m - 4)
12) If we subtract 4 from numb								2
2. The state of th	4 - m)
13) Murad and farida have 70 pounds, if what Murad has is k pounds, then								
what farida has is					_ :			2
(:	70 + k	or 7	0 - k	or 7	0 k	or	70 ÷ k)

UNIT (3) CONCEPT (1)

Q2: Complete the following:

-	A-12 12 2 13 5			40 10		721
11	The algebraic expression	for	"a number	DCC	7'	ic
-	THE digebraic expression	101	allullibel	1633	,	13

- 2) The verbal expression for 2m 7 is
- 3) The number of terms of the expression: 3 + 4x is
- 4) The constant in the expression 3 y + 2 x 5 is
- 5) The coefficient of 2 + 3 a 5 is
- 6) "4 increased by m" in algebraic expression is
- 7) The verbal form of "2 x + 3" is
- 8) The like terms in the expression: $2 \times + 3 \times + 3$ are
- 9) The algebraic expression of "subtract 3 from k" is
- 10) Twice the sum of a number and five is

Q3: Answer the following:

- 1) A square of side length L, write an algebraic expression for the perimeter of this square?
- 2) Write verbal expression for each of the following algebraic expression:
 - a. 3(m + 4)
 - b. 8 3n
 - c. 1 MATHEMATICS TEACHER

 T F L: 0 1 0 0 3 7 8 0 8 5 7
- 3) write an algebraic expression for each of the following verbal expressions:
 - a. Product of a number p and 75 is
 - b. Three fifths a number n is
 - c. 8 decreased by three times a number is
 - d. Twice the sum of a number and three is
 - e. Add 6 to one third of a number is
 - f. The quotient of a number by 8 is increased by 12 is

Q1: Choose the correct answer:

- 1) 384
- 2) 5
- 3) 0
- 4) 1
- 5) 2
- 6) 0
- 7) 6 and 10
- 8) 1
- 9) 18
- 10) 6

- 11) 8
- 12) 4
- 13) 4 5
- 14) 196 R 4
- 15) 16
- 16) 9 and 4
- 17) 5 (5+4)
- 18) 10 (2+7)
- 20) 24 + 40

- 21)9
- 22) their product
- 23) 21
- 24) 7

Q2: Complete the follwoing:

1) 6,048

11)0

2) 3,479

12) 1

3) 2

- 13) 42 **ASSR**
- 4) 3 MATHEMAT¹4)²,², ² and ³ACHER
- 5) 2 T E L: 0 1 0 0 3 7 8 0 8 5 7 6) 3,5

- 7) their product
- 17) 3 7

8) 97

9) 2

18) 7

10) 2

19) 2 $\frac{1}{8}$

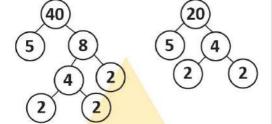
Q3: Answer the following:

- 1) Number of oranges in the box = 1,378 ÷ 25 = 55 R 3
- 2) Number of buses needed = 464 ÷ 45 = 10 R 14

3)
$$40 = 2 \times 2 \times 5 \times 2$$

 $20 = 2 \times 2 \times 5$

The expression: 20(1+2)



Expression: 6(8+3)

5) numbers are: 30 and 42

Common factors: 2 and 3

GCF: 6

LCM: 210 No

6) Numbers are: 12 and 35

Common factors: 1

GCF: 1 LCM: 420

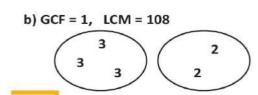
7) MARCHER TEACHER

Expression: 6 (1+3), So Number of bags is 6

- 8) Murad pay = $9\frac{1}{2} + 5\frac{1}{4} + 4 = 18\frac{3}{4}$
- 9) $18 = 2 \times 3 \times 3$

 $LCM = 2 \times 3 \times 3 \times 2 = 36$

a) GCF = 5, LCM = 30 10)



UNIT (2) ANSWER MODEL

Q1: Choose the correct answer:

1) Integer	11) -6	21) 1	31) not subset	41) 3.15
2) 6	12) 0	22) rational	32) -4	42) infinite
3) 0	13) 12	23) -2, -3	33) 20	43) 3
4) -1	14) -6	24) subset	34) 8	44) 0
5) natural	15) greater than	25) not subset	35) farther to	45) -14
6) -1	16) 0	26) not belong	36) 6.3	46) -7
7) -7	17) rational	27) not belong	37) 5, - <mark>5</mark>	
8) -10	18) 0	28) subset	38) 4	
9) 5	19) 500	29) subset	39) -7	
10) infinite	20) 2	30) -11	40) integer	

Q2: Complete the following:

- 1) 1 2) 6 3) -5, -4, -3/, 2/, -1, 6/, F 13/A-6 | CS TE 4) 1 T E L : 0 14) Gatura 7 8
- 5) 5 15) -2, -1, 0, 1
- 6) -5 16) 6 7) -10 17) - 4 8) -6 and -7 18) 7 or -7
- 9) equal 19) belong 10) 0.6 20) belong
- 21) not subset 22) subset A₂₃) of E R O₂₄) 05 7 25) $\frac{-15}{10}$

Q3: Answer the following:

1) The order: - 1.9 , - 0.5 , 0 , 2.8 , | - 6.5 |

- The order: -11,
$$\frac{-7}{2}$$
, 0, $\frac{5}{2}$, 3, $3\frac{1}{4}$

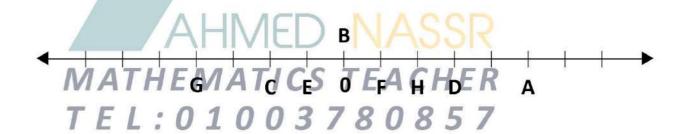
2) The order: 7.5 , |-3.5| , |-1| , $\frac{-8}{9}$, -2 $\frac{1}{3}$

- The order:
$$2\frac{1}{2}$$
, $1\frac{1}{2}$, $\frac{-3}{4}$, $-1\frac{1}{3}$, $-4\frac{1}{2}$

3) 1) - 5.11 , - 5.12 (Answer may vary)

2)
$$\frac{21}{30}$$
, $\frac{22}{30}$ (Answer may vary)

4)



Q1: Choose the correct answer:

$$1) 4m + 3$$

$$9) x + 6$$

$$3)7 + 3$$

Q2: Complete the following:

- 2) double a number decreased by 7
- (Answers may vary)

- 3) 2
- 4) -5
- 5) 3
- 6) 4 + m
- 7) two times a number added to 3

(Answers may vary)

- 8) 2x, 3x
- 9) k 3
- 10) 10) 2(k + 5)

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Q3: Answer the following:

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- 1) 4L
- 2) a. three times the sum of m and 4
- (Answers may vary)
- b. three times a number less than 8
- (Answers may vary)
- c. Half a number added to 9
- (Answers may vary)

- 3) a. 75 p
- b. $\frac{3}{5}$ n
- c. 8 3x
- d. 2(k+3)
- e. 6 + $\frac{1}{3}$ m
- f. (x ÷ 8) + 12

1 Choose the correct answer

(1) In the equation: $378 \div 25 = 15 \text{ R3}$, the dividend is

A 378

B 25

© 15

D 3

(2) In the equation: $544 \div 12 = 45 \text{ R4}$, the divisor is

A 544

B 12

© 45

0 4

(3) In the equation: $5,314 \div 15 = 354 \text{ R4}$, the quotient is

- A 5,314
- **B** 15

© 354

D 4

(4) In the equation: $1,860 \div 32 = 58 \text{ R4}$, the remainder is

- A 1,860
- **B** 32

- **©** 58
- **D** 4

(5) In the equation: $2,150 \div 25 = 86$, the remainder is

(A) ()

- ® 2,150
- © 25

© 86

(6) $820 \div 24 = 34 \text{ R} \dots$

A) 0

B 2

© 4

0 6

 $(7) 6,280 \div 25 = ...$

- ® 251 R5
- © 251

① 255 R1

(8) A school has 1,440 students which distributed between 24 classes equally. How many students are in each class?

(9) Eslam saves 210 L.E weekly. How much did he save daily?

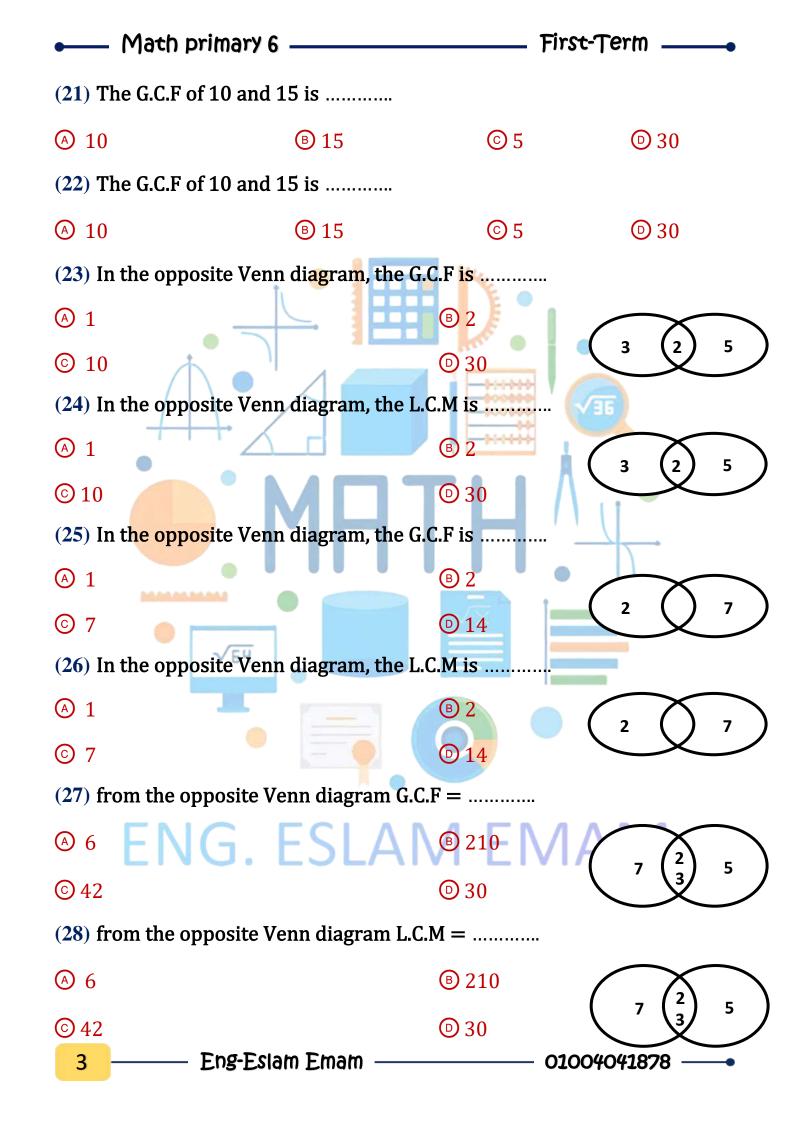
A 10

B 20

© 30

1 40

- Math	primary 6 ——	F	irst-Term ——•				
(10) The smallest prime number is							
A 0	® 1	© 2	© 3				
(11) The smallest odd prime number is							
A 0	B 1	© 2	© 3				
(12) The only even prime number is							
(12) The second	B 1	© 2	© 3				
/	mon factor of all n	umbers is					
A 0	® 1	© 2	© 3				
(14) The com	mon multiple of al	l numbers is	1				
A 0	B 1	© 2	© 3				
(15) whi <mark>ch of</mark>	<mark>the following is a</mark>]	prime number?	// (1)				
(A) 20	® 15	© 7	D 9				
(16) which of the following is not a prime number?							
A 2	√Б® 5	© 7	D 9				
(17) The G.C.F of 3 and 5 is							
A 1	® 3	©5	© 15				
(18) The L.C.M of 3 and 5 is							
A 1	B3ES	LA Mº 5 E N	0 15				
	of 6 and 12 is						
A 1	B 6	© 12	© 72				
(20) The L.C.M of 6 and 12 is							
A 1	B 6	© 12	© 72				
2	- Eng-Eslam Ema	am ———— (01004041878				



(29) the G.C.F of two relatively prime numbers is

A 0

B 1

- © 2
- **D** 3

(30) which of the following are relatively prime numbers?

(A) 2 and 10

- **B** 4 and 9
- © 4 and 6
- (D) 8 and 6

$$(31)$$
 $35 + 42 = ___ (5 + 6)$

A 35

B 30

- © 6
- © 7

$$(32) 16 + 24 = 8 (2 + \underline{\hspace{1cm}})$$

A 24

® 16

- © 2
- **D** 3

$$(33) 8 + 24 = 8 (__+ + 3)$$

A 1

B 2

- © 3
- ② 24

$$(34) 10 + 45 = 5 (_ + _)$$

A 10,40

® 5,40

- © 9,5
- D 2.9

$$(35)\frac{2}{5} + \frac{3}{10} = \cdots$$

 $\triangle \frac{5}{15}$

- $\bigcirc \frac{5}{10}$
- $\bigcirc \frac{1}{2}$

$$(36)\frac{3}{4} - \frac{5}{8} = \cdots$$

 $\triangle \frac{1}{4}$

 $\mathbb{B}\frac{1}{8}$

- $\bigcirc \frac{3}{8}$
- ⊚ 5

$$(37)\ 5\frac{1}{2}+3\frac{1}{5}=\cdots$$

 $\mathbb{B} \, 8 \frac{7}{10}$

- $\odot 8\frac{1}{2}$
- $0.8\frac{2}{5}$

$$(38) \ 2\frac{1}{4} - 1\frac{1}{2} = \cdots$$

 $\triangle 1\frac{1}{2}$

 $\triangle 8^{\frac{2}{7}}$

 $\mathbb{B}\frac{3}{4}$

- © $1\frac{3}{4}$
- $\bigcirc \frac{4}{3}$

(39) which is an integer?

 \bigcirc -0.2

 $\mathbb{B}\frac{1}{2}$

- \bigcirc -10
- ① $3\frac{1}{2}$

(40) which of the following numbers is an integer?

 $\bigcirc -\frac{24}{5}$

- $\bigcirc \frac{15}{5}$
- ② 3.2

(41) the smallest counting number is

 \bigcirc 0

B 1

- $\bigcirc -10$

(42) the smallest natural number is

 \bigcirc 0

B) 1

- $\bigcirc -10$

(43) the greatest negative integer is

 \bigcirc -2

© 0

 $\bigcirc -[-1]$

(44) the greatest number from the following is

 \bigcirc -2

- © **1**10
- □ −11

(45) the greatest non-positive integer is

A 1

B 0

(46) the smallest non-negative integer is

A 1

(B) ()

- $\bigcirc -[-1]$

(47) The number is neither positive nor negative.

- A 1

(48) the integer which just next -5 is

 \bigcirc -3

(B) -4

- \bigcirc -5
- $\bigcirc -6$

(49) the integer which just before -1 is

 \bigcirc -2

(B) ()

- © 1
- ②

(50) Each number in the set of integers is called

A element

(B) set

© subset

not subset

(51) the additive inverse of -2 is

 \bigcirc -2

B 2

© 0

D 4

(52) the opposite of 5 is t.

A 5

 $\bigcirc -7$

(53) the opposite of - 5 is

A 5

 $\bigcirc 0$

(54) the opposite of -[-5] is

(A) 5

(55) the opposite of the opposite of 5 is.

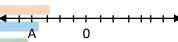
 \bigcirc -5

- $\mathbb{B} [-5]$
- © 0
- ① 10

(56) in the opposite number line, the integer A is ..

√**6**4

 \bigcirc -1



 \bigcirc -3

(57) which of the following is nearest to zero?

 \bigcirc -4

B 4

- $\bigcirc -3$
- 2

(58) -5

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- (59) -2
- **-7**
- \triangle >

(B) <

 $\bigcirc =$

- (60) 3
- [-3]

 $\bigcirc =$

B <

Math primary 6	First-Term	_
(61) All the following numbers are rational	al except	
(A) 0 (B) 5		
(62) All the following numbers are rational	al except	
(A) 0 (B) $\frac{2}{7}$	$\bigcirc \frac{1}{7} \qquad \bigcirc \frac{4}{2-2}$	
(63) the best subset of the number 1 is	······································	
A counting number	® natural number	
© integer	© rational number	
(64) the best subset of the number 0 is	111111	
A counting number	® natural number	
© integer	© rational number	
(65) The best subset of the number -5 is	······································	
A counting number	® natural number	٠
© integer	© rational number	
(66) The best subset of the number 4.854	· is	
A counting number	® natural number	
© integer	© rational number	
(67) - 4 set of counting numbers.		
A belongs to	(B) does not belong to	Л
© is a subset of ESLA	is not a subset of	
(68) the opposite of - 5 set of natu	ural numbers.	
A belongs to	(B) does not belong to	
© is a subset of	is not a subset of	

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- (69) 2.5 set of integers.
- (A) belongs to

® does not belong to

© is a subset of

- is not a subset of
- (70) set of integers set of rational numbers.
- (A) belongs to

(B) does not belong to

is a subset of

- is not a subset of
- (71) set of natural set of counting numbers.
- (A) belongs to

B does not belong to

is a subset of

- is not a subset of
- set of integers. (72) set of counting
- A belongs to

(B) does not belong to

© is a subset of

- is not a subset of
- (73) the number 5 in the form $\frac{a}{h}$ is ...
- $\triangle \frac{1}{5}$

- (74) the number $2\frac{3}{5}$ in the form $\frac{a}{h}$ is
- $\triangle \frac{23}{5}$

- $\bigcirc \frac{13}{5}$
- © 253

- (75) the number -1.5 in the form $\frac{a}{b}$ is
- (A) $-\frac{1}{5}$ (B) $-\frac{5}{1}$ (C) $-\frac{15}{10}$ (D) $-5\frac{1}{10}$

- $(76) \frac{3}{5}$
- (A) >

B <

©=

- $(77) \frac{1}{4}$
- \triangle >

B <

 $\bigcirc =$

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- **(78) 0**. **7** 0.65
- \triangle >

B <

 $\bigcirc =$

- $(79)\frac{2}{8}$ 0.5
- \triangle >

(B) <

- © =
- (80) the greatest number from the following is
- \triangle $\frac{1}{2}$

- (81) the smallest number from the following is
- A 0.11

B 0.3

- **0** 0.15

- (82) is lying between 3.1 and 3.2
- A 3.15

® 3.21

- © 3.20
- ② 3.22

- (83) the absolute values of 5 is
- 8 5

- $\bigcirc 0.5$
- **0** 0.125

- (84) the absolute values of $-\frac{1}{2}$ is
- \bigcirc $\frac{1}{2}$
- $\mathbb{B}\frac{1}{2}$

- (85) the opposite of $\left|-\frac{1}{2}\right|$ is
- $\triangle \frac{1}{2}$

- (86) the absolute value of the opposites of $-2\frac{1}{5}$ is
- \triangle $4\frac{2}{5}$

B 0

- © $-2\frac{1}{5}$ © $2\frac{1}{5}$
- (87) the absolute values of opposites are
- (A) equal
- ® different
- © negative
- (D) other

- $(88) |2| \times |-2| = \dots$
- \bigcirc 0

B 4

 $\bigcirc -4$

 $\bigcirc -1$

- A >

B <

© =

- $(56) |-7| > \dots$
- B |−7|

© |-8|

- □ |-9|
- (90) which of the following is an algebraic expression?
- \bigcirc 44 3 + 4

 $\bigcirc 3 + 7 - 0$

© 15a - 32

- \bigcirc 2(3 + 14)
- (91) which of the following is a numeric expression?
- \triangle 46z 25

© 15a + 2x

- \bigcirc 2(3 + 14)
- (92) The constant in the expression 2x + 5 is
- A) 2

 $\sqrt{5(B)}2x$

- $\bigcirc 2x + 5$
- **D** 5
- (93) The coefficient in the expression 2x + 5 is
- A) 2

 \bigcirc 2x

- © 2x + 5
- **D** 5
- (94) The constant in the algebraic expression 5 + 3y + 2x + 1 are
- A 5,3,2,1
- ® 3,2

© 3.2.1

- [©] 5.1
- (95) The coefficients in the algebraic expression 5 + 3y + 2x + 1 are
- A 5,3,2,1
- ® 3.2

© 3,2,1

[©] 5,1

- (96) Which of the following are like terms?
- A 25,52
- B 2b, 2c
- © ab, aC
- $\bigcirc n, m$

(97) The number of terms of the expression: 5 - 2m - 3m + 4 is ... terms.

A 5

(B) - 2

(0) - 3

(D) 4

(98) the number of like terms in the expression 3 + 2x + 5 is

A 1

(B)2

(c) 3

(D) 4

(99) $2 + 3[\underline{}] + 5$, complete to get a numeric expression.

 \bigcirc a

- © $30 \div 5$
- $\bigcirc b + c$

(100) we subtract 5 from the number x, we get

 \bigcirc 5x

 $\bigcirc 5-x$

- ① x + 5

(101) Three times a number less two is .

- (A) 3x + 2
- (B) 3x 2
- $\bigcirc 2x3x$

(102) Three times a number less than two is

- (A) 2 + 3x (B) 3x 2
- \bigcirc 2x3x

① 2 - 3x

(103) Subtracting 3 from double a number

 $\bigcirc n-3$

- $\bigcirc 2n 3$
- © 3n + 2

 $\bigcirc 5n$

(104) Twice the difference of a number and 5 is ..

- (A) 2y + 5
- (B) 2y 5

(105) The algebraic expression "Twelve less than three groups of y" is. ----

- (A) 12 3y
- (B) 3y 12
- © $\nu 12$
- ① 12 v

(106) Laila saved n L.E. and her mother gave her 5 L.E., she will have ... L.E.

- $\bigcirc n-5$
- $\bigcirc n + 5$
- \bigcirc 5n

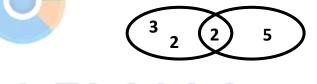
 $\bigcirc 5 - n$

2 complete

- (1) $8.529 \div 25 = 341R \dots$
- (2) The divisor in the equation: $16,692 \div 52 = 321$ is.....
- (3) The smallest prime number is
- (4) The smallest odd prime number is
- (5) The only even prime number is
- (6) The common factor of all numbers is
- (7) The common multiple of all numbers is
- (8) The G.C.F of 5 and 7 is
- (9) The L.C.M of 5 and 7 is
- (10) The G.C.F of 4 and 8 is
- (11) The L.C.M of 4 and 8 is
- (12) The G.C.F of 6 and 8 is
- (13) In the opposite Venn diagram
 , the G.C.F is



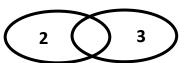
, the L.C.M is





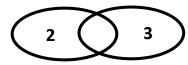
(15) In the opposite Venn diagram

, the G.C.F is



(16) In the opposite Venn diagram, the

, the L.C.M is



(17) The G.C.F of two relatively prime numbers is

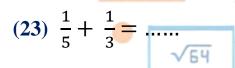
 $(18) \ 8(5+4) = 40 + \underline{\hspace{1cm}}$

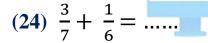


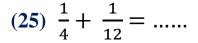
$$(20) \ 5(2+\underline{\hspace{1cm}}) = 10+35$$

$$(21) 9 (1+2) = 9 +$$

$$(22) \quad \underline{\qquad} [5+2] = 15+6$$









(27)
$$\frac{5}{6} - \frac{3}{8} = \dots$$

$$(28) \ 10 \ \frac{1}{2} - 5 \ \frac{1}{3} = \dots$$

•—	— Math primary 6 ———————————————————————————————————
(29)	Each number in the set of integers is called
(30)	The smallest counting number is
(31)	The smallest natural number is
(32)	The smallest positive integer number is
(33)	The greatest negative integer is
(34)	The greatest non-positive integer is
(35)	The smallest non-negative integer is
(36)	The number is neither positive nor negative.
(37)	The integer which just next – 1 is
(38)	The integer which just before – 1 is
(39)	The integers between -3 and 2 are
(40)	The number of integers between -3 and 2 is
(41)	The opposite of 3 is
(42)	The opposite of -3 is
(43)	The opposite of zero is
(44)	The distance between the opposite of 4 and 0 on the number line
(45)	equals units.
(45)	The distance between the number 2 and its opposite on the number
	line equals units.

- (46) The best subset of the number 25 is
- (47) The best subset of the number 0 is
- (48) The best subset of the number 1 is
- (49) The best subset of the number 1.5 is
- $(50) |-7| = \dots$
- **(51)** | 0 | =
- $(52) \mid -3 \mid + \mid 2 \mid = \dots$
- $(53) |-3| \times |-5| =$
- $(54) |-2| \times |0| = \dots$
- (55) positive integer negative integer
- (56)negative integer zero
- positive integer **(57)** zero
- (58)
- **(59)** -12
- 2.47 **(60)** 2.5
- (61) The additive invers of 5
- |-1|**(62)** |-3|
- EMAM
- **(64)** |-5|
- **(65)** |-2.71| 2.7
- (66) |-10| + |-2||20| - |-10|
- (67) The opposite of $\left|-\frac{1}{2}\right|$ is

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First-Term -

- (68) The constant in the expression 3y + 2x 5 is
- (69) The constant in the expression 2x + y is
- (70) The coefficient in the expression 3y + 2x 5 is
- (71) The coefficient in the expression 1.5 + 4 5 is
- (72) The verbal expression from "x + 2" is
- (73) The verbal expression from "y 5" is
- (74) The verbal expression from "5x" is
- (75) The verbal expression from "4 3n" is
- (77) The algebraic expression for "a number less than 7" is
- (78) The algebraic expression for "Subtract 3 from the number y "is
- (79) The algebraic expression for
 - Four times the sum of a number and seven is
- (80) The algebraic expression for
 - "Add 5 to the doubte of the number x" is

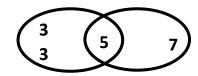
ENG. ESLAM EMAM

Answer the following questions

Using the following Venn diagram, complete

a- The two numbers represented in the Venn diagram are ----- and -----

b- The G.C.F of the two numbers is ------



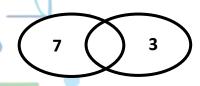
c- The L.C.M of the two numbers is -

d- Are the two numbers relatively prime numbers? (Yes - No)



a- The two numbers represented in the Venn diagram are ----- and -----

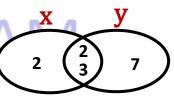
b- The G.C.F of the two numbers is ----



c- The L.C.M of the two numbers is -----

d- Are the two numbers relatively prime numbers? (Yes - No)

Using the following Venn diagram, complete (3)



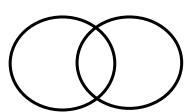
The $GCF = \dots$

The
$$LCM = \dots$$

The expression
$$= \dots (\dots + \dots)$$

(4) Use Venn diagram to find G.C.F and L.C.M of:

15 and 10



Order the given set of numbers from least to greatest. (5)



(6) Ahmed has 10 L.E. in her money box, he will save 5 L.E. daily.

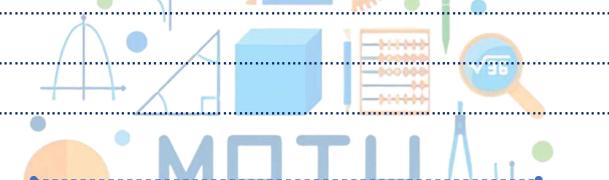
a- What algebraic expression represent this situation?

b- How much money in the money box after 3 days?

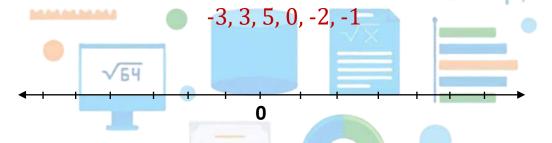
Find two rational numbers lies between: $\frac{3}{4}$ and $\frac{4}{5}$ **(7)**



(8) Find two rational numbers lies between: -1.2 and -1.3



(9) Represent the numbers on the number line.



(10) A factory produces 1,645 pieces of cloth weekly.

How many pieces did the factory produce daily?



Choose the correct answer

(1) In the equation: $378 \div 25 = 15 \text{ R3}$, the dividend is

A 378

B 25

© 15

① 3

(2) In the equation: $544 \div 12 = 45 \text{ R4}$, the divisor is

A 544

B 12

© 45

0 4

(3) In the equation: $5,314 \div 15 = 354 \text{ R4}$, the quotient is

- A 5,314
- **B** 15

© 354

D 4

(4) In the equation: 1,860 \div 32 = 58 R4, the remainder is

- A 1,860
- **B** 32

© 58

1 4

(5) In the equation: $2,150 \div 25 = 86$, the remainder is

A 0

- ® 2,150
- © 25

086

(6) $820 \div 24 = 34 R \dots$

A 0

B 2

© 4

0 6

(7) $6,280 \div 25 = \dots$

- A 215 R5
- ® 251 R5
- © 251

① 255 R1

(8) A school has 1,440 students which distributed between 24 classes equally. How many students are in each class?

- A 40
- B 50

© 60

D 70

(9) Eslam saves 210 L.E weekly. How much did he save daily?

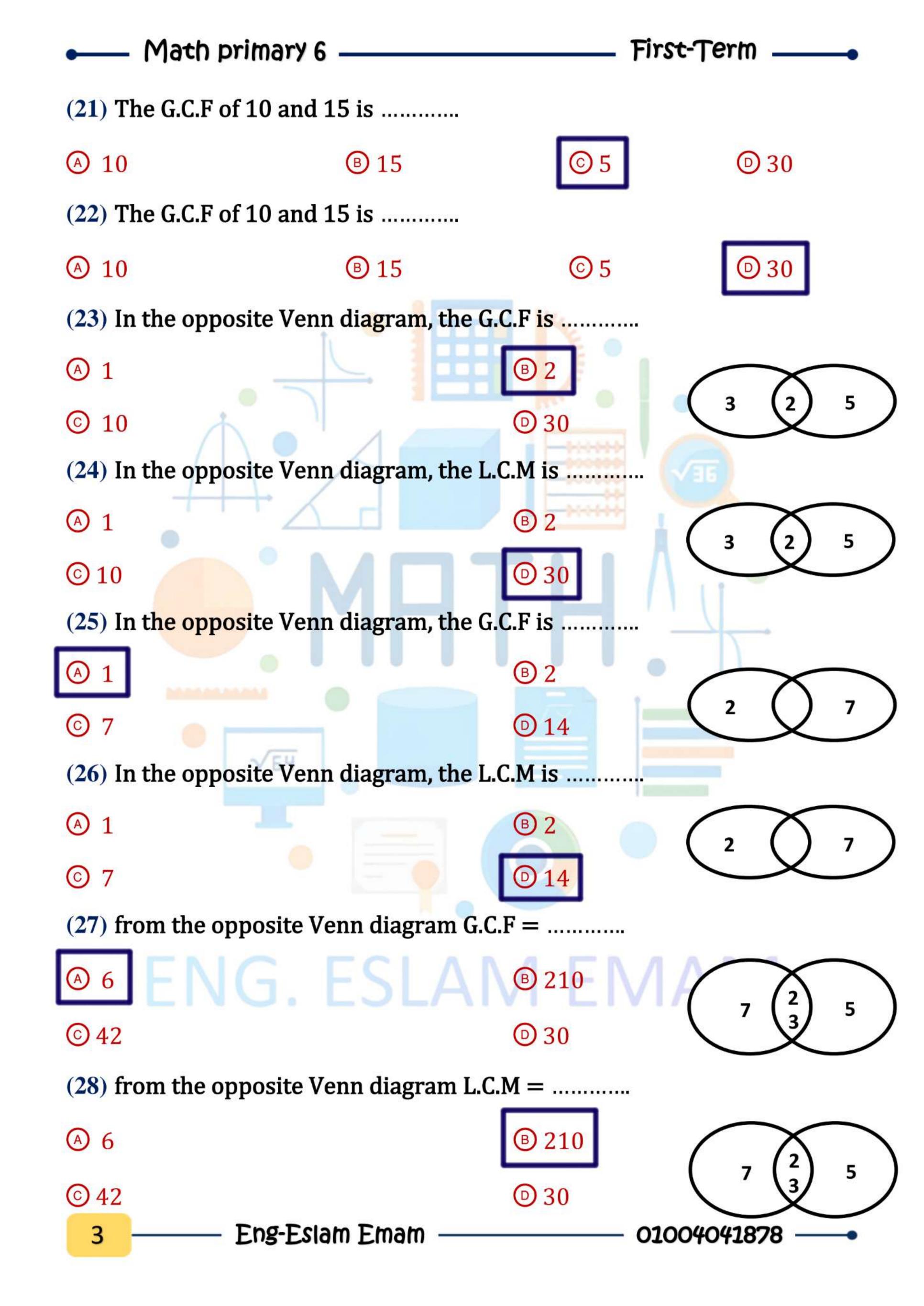
A 10

B 20

© 30

1 40

Math	primary 6 ——		First-Term ——	
(10) The small	lest prime numbei	r is		
A 0	B 1	© 2	© 3	
(11) The small	lest odd prime nui	mber is		
A 0	B 1	© 2	© 3	
(12) The only	even prime numb	er is		
A 0	B 1	© 2	© 3	
(13) The comr	non factor of all n	umbers is		
A 0	B 1	© 2	© 3	
(14) The comr	non multiple of all	numbers is		
A 0	B 1	© 2	© 3	
(15) which of	the following is a p	orime number?		
A 20	B 15	© 7	© 9	
(16) which of	the following is no	t a prime number?		
A 2	√ Б ¹ ® 5	© 7	0 9	
(17) The G.C.F of 3 and 5 is				
A 1	B 3	© 5	© 15	
(18) The L.C.M	I of 3 and 5 is			
A 1	B 3	<u></u> 5	0 15	
(19) The G.C.F	of 6 and 12 is	******		
A 1	B 6	© 12	D 72	
(20) The L.C.M of 6 and 12 is				
A 1	B 6	© 12	© 72	
2	- Eng-Eslam Ema)m —————	- 01004041878	



(29) the G.C.F of two relatively prime numbers is

 \bigcirc 0

- © 2
- **D** 3

(30) which of the following are relatively prime numbers?

A 2 and 10

- **B** 4 and 9
- © 4 and 6 © 8 and 6

$$(31)$$
 $35 + 42 = ___ (5 + 6)$

A 35

B 30

$$(32)$$
 16 + 24 = 8 $(2 + _)$

A 24

B 16

- © 2

$$(33) 8 + 24 = 8 (_+ 3)$$

A 1

(B) 2

- © 3

$$(34) 10 + 45 = 5 (_ + _)$$

A 10,40

® 5,40

- © 9, 5

$$(35)\frac{2}{5} + \frac{3}{10} = \cdots$$

- $0^{\frac{1}{2}}$

$$(36)\frac{3}{4}-\frac{5}{8}=\cdots$$

$$(37) \ 5\frac{1}{2} + 3\frac{1}{5} = \cdots$$

(A) $8\frac{2}{7}$

- © $8\frac{1}{2}$
- $08^{\frac{2}{5}}$

$$(38) \ 2\frac{1}{4} - 1\frac{1}{2} = \cdots$$

- Eng-Eslam Emam

D 2

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(48) the integer which just next -5 is

(49) the integer which just before -1 is

Eng-Eslam Emam

5

 \bigcirc 0

(50) Each number in the set of integers is called

(A) element

® set

© subset

not subset

(51) the additive inverse of -2 is

 \bigcirc -2

 $\bigcirc 0$

0 4

(52) the opposite of 5 is

A 5

(c) 0

 $\bigcirc -7$

(53) the opposite of - 5 is

O 0

 $\bigcirc -7$

(54) the opposite of -[-5] is

A 5

© 0

(55) the opposite of the opposite of 5 is

- © 0
- **10**

(56) in the opposite number line, the integer A is

 \bigcirc -1

 \bigcirc -3

(57) which of the following is nearest to zero?

B 4

(58) -5

V54



(59) -2

© =

(60) - 3

(B) <

- Math	primary 6 ———	First-Term		
(61) All the following numbers are rational except				
A 0	B 5	$\bigcirc \frac{1}{7}$ $\bigcirc \frac{4}{0}$		
(62) All the following	lowing numbers are ra	ational except		
A 0	$\frac{2}{7}$	$\bigcirc \frac{1}{7}$ $\bigcirc \frac{4}{2-2}$		
(63) the best st	ubset of the number 1	is		
(A) counting num	aber	® natural number		
© integer		© rational number		
(64) the best st	ubset of the number 0	is		
(A) counting num	ber	® natural number		
© integer		© rational number		
(65) The best s	subset of the number -	5 is		
(A) counting num	ber	® natural number		
© integer		© rational number		
(66) The best s	(66) The best subset of the number 4.854 is			
A counting num	ber	® natural number		
© integer		© rational number		
(67) - 4	set of counting numb	bers.		
A belongs to		® does not belong to		
is a subset of	fG. ESLA	is not a subset of		
(68) the opposite of - 5 set of natural numbers.				
(A) belongs to		® does not belong to		
is a subset of	f	is not a subset of		
	Eng-Eclam Emam	0100//0//1000		
	- Eng-Eslam Emam -	——————————————————————————————————————		

- (69) 2.5 set of integers.
- (A) belongs to

B does not belong to

© is a subset of

- is not a subset of
- (70) set of integers set of rational numbers.
- (A) belongs to

(B) does not belong to

is a subset of

- is not a subset of
- (71) set of natural set of counting numbers.
- A belongs to

(B) does not belong to

is a subset of

- is not a subset of
- (72) set of counting set of integers.
- (A) belongs to

(B) does not belong to

is a subset of

- is not a subset of
- (73) the number 5 in the form $\frac{a}{b}$ is

- **0** 0.5

- (74) the number $2\frac{3}{5}$ in the form $\frac{a}{b}$ is

- © 253

- (75) the number -1.5 in the form $\frac{a}{b}$ is

- **(76)**

© =

Eng-Eslam Emam

- (78) 0.7 **0.65**
- A >

B <

© =

- $(79)^{\frac{2}{8}}$ 0.5
- A >

B <

- © =
- (80) the greatest number from the following is
- $\triangle \frac{1}{2}$

 $\mathbb{B}\frac{1}{3}$

- $\odot \frac{1}{4}$
- $0\frac{1}{12}$
- (81) the smallest number from the following is
- Ø 0.11

(B) 0.3

- $\odot \frac{1}{2}$
- O 0.15

- (82) is lying between 3.1 and 3.2
- A 3.15

® 3.21

- © 3.20
- **3.22**

- (83) the absolute values of 5 is
- \bigcirc -5

B 5

- © 0.5
- O 0.125

- (84) the absolute values of $-\frac{1}{2}$ is
- \bigcirc $\frac{1}{2}$

 $\mathbb{B}^{\frac{1}{2}}$

- $\bigcirc -\frac{3}{2}$
- ① $3\frac{1}{2}$

- (85) the opposite of $\left|-\frac{1}{2}\right|$ is
- \bigcirc $\frac{1}{2}$

 $\mathbb{B}\frac{1}{2}$

- $\bigcirc -\frac{3}{2}$
- ① $3\frac{1}{2}$
- (86) the absolute value of the opposites of $-2\frac{1}{5}$ is
- (A) $4\frac{2}{5}$

B 0

- $\bigcirc -2\frac{1}{5}$
- ① $2\frac{1}{5}$
- (87) the absolute values of opposites are
- (A) equal
- ® different
- © negative
- other 🛈

9

- $(88) |2| \times |-2| = \dots$
- A 0

B 4

 $\odot -4$

 $\bigcirc -1$

- A >

B <

© =

- $(56) |-7| > \dots$

B |-7|

© |-8|

- 0 |-9|
- (90) which of the following is an algebraic expression?
- \bigcirc 44 3 + 4

 $\bigcirc 3 + 7 - 0$

© 15a - 32

- \bigcirc 2(3 + 14)
- (91) which of the following is a numeric expression?
- \bigcirc 46z 25

(B) 3x + 7 - 0

 \bigcirc 15a + 2x

- (92) The constant in the expression 2x + 5 is
- \bigcirc 2

 $\mathbb{B}2x$

- © 2x + 5
- **0** 5
- (93) The coefficient in the expression 2x + 5 is
- A) 2

 \bigcirc 2x

- $\odot 2x + 5$
- **0** 5
- (94) The constant in the algebraic expression 5 + 3y + 2x + 1 are
- A 5,3,2,1
- B 3,2

@ 3,2,1

- [©] 5,1
- (95) The coefficients in the algebraic expression 5 + 3y + 2x + 1 are
- A 5,3,2,1
- ® 3,2

© 3,2,1

[©] 5,1

- (96) Which of the following are like terms?
- A 25,52
- B 2b, 2c
- @ab, aC
- $\bigcirc n, m$

(97) The number of terms of the expression: 5-2m-3m+4 is ... terms.

 \bigcirc 5

 $\bigcirc -2$

 \bigcirc -3



(98) the number of like terms in the expression 3 + 2x + 5 is

(A) 1

© 3

D 4

(99) 2 + 3[+ 5, complete to get a numeric expression.

 \triangle a

 $\bigcirc k$

- © $30 \div 5$
- $\bigcirc b + c$

(100) we subtract 5 from the number x, we get

 \triangle 5x

- \bigcirc 5 x
- ① x + 5

(101) Three times a number less two is

- (A) 3x + 2
- (B) 3x 2
- \bigcirc 2x3x

(102) Three times a number less than two is

- (A) 2 + 3x
- (B) 3x 2
- \bigcirc 2x3x

(103) Subtracting 3 from double a number

- $\bigcirc n-3$
- \mathbb{B}_{2n-3}
- © 3n + 2

 $\bigcirc 5n$

(104) Twice the difference of a number and 5 is

- $\triangle 2y + 5$
- (B) 2y 5 (O) 2(y + 5)
- ① 2(y-5)

(105) The algebraic expression "Twelve less than three groups of y" is. -----

- \bigcirc 12 3y
- (B) 3y 12
- © y 12
- \bigcirc 12 y

(106) Laila saved n L.E. and her mother gave her 5 L.E., she will have ... L.E.

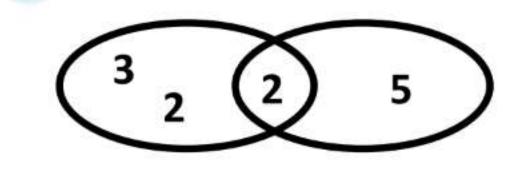
- $\bigcirc n-5$
- \odot 5n

 $\bigcirc 5-n$

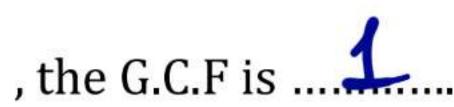
2 complete

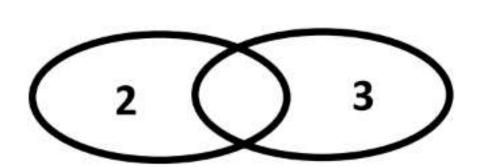
- (1) $8,529 \div 25 = 341R \dots$
- (3) The smallest prime number is ... 2......
- (4) The smallest odd prime number is
- (5) The only even prime number is
- (6) The common factor of all numbers is
- (7) The common multiple of all numbers is
- (8) The G.C.F of 5 and 7 is

- (11) The L.C.M of 4 and 8 is8....
- (12) The G.C.F of 6 and 8 is 2....
- (13) In the opposite Venn diagram, the G.C.F is2....



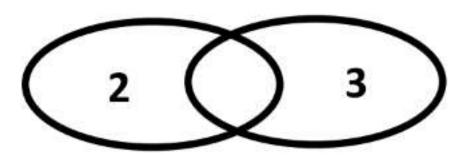
(15) In the opposite Venn diagram





(16) In the opposite Venn diagram, the

, the L.C.M is6....



(17) The G.C.F of two relatively prime numbers is ...

(18)
$$8(5+4) = 40 + \frac{32}{}$$

(18)
$$8(5+4) = 40 + \frac{32}{2}$$

(19) $18 + 9 = 9 (2 + 1)$
(20) $5(2 + 7) = 10 + 35$

$$(20) \ 5(2+7)=10+35$$

$$(21) 9 (1+2) = 9 + \underline{18}$$

(22)
$$3[5+2] = 15+6$$

$$\frac{1}{5} + \frac{1}{3} = \frac{8}{15}$$

$$(24) \ \frac{3}{7} + \frac{1}{6} = \frac{25}{42}$$

$$(25) \frac{1}{4} + \frac{1}{12} = \frac{42 \div 4}{12 \div 4} = \frac{3}{3}$$

$$(26) \frac{5}{6} = \frac{7}{10} = \frac{4 \div 2}{30 \div 2} = \frac{2}{15} \text{LAM} = \frac{10}{30} = \frac{1}{2} = \frac{2}{15} = \frac{1}{15} = \frac$$

$$(27) \ \frac{5}{6} - \frac{3}{8} = \frac{11}{24}$$

(28)
$$10^{\frac{1}{2}} - 5^{\frac{1}{3}} = \frac{15}{3}$$

•	- Math primary 6
(29)	Each number in the set of integers is callede.lement
(30)	The smallest counting number is 1
(31)	The smallest natural number is
(32)	The smallest positive integer number is
(33)	The greatest negative integer is
(34)	The greatest non-positive integer is
(35)	The smallest non-negative integer is
(36)	The number is neither positive nor negative.
(37)	The integer which just next – 1 is
	The integer which just before – 1 is
(39)	The integers between -3 and 2 are
(40)	The number of integers between -3 and 2 is4Integers
(41)	The opposite of 3 is
(42)	The opposite of -3 is
(43)	The opposite of zero is
	The distance between the opposite of 4 and 0 on the number line equals units.
	The distance between the number 2 and its opposite on the number
	line equals units.

(48) The best subset of the number – 1 is ... I. ... Itelers

(49) The best subset of the number – 1.5 is ... Rational

(50)
$$|-7| = ... 7...$$

(51)
$$|0| = ...$$

$$(52) |-3|+|2|=...5...$$

(53)
$$|-3| \times |-5| = 1...$$

(54)
$$|-2| \times |0| =$$

(55) positive integer negative integer

(61) The additive invers of 5

(66)
$$|-10| + |-2|$$
 \ge $|20| - |-10|$

(67) The opposite of
$$\left|-\frac{1}{2}\right|$$
 is

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First-Term

- (70) The coefficient in the expression 3y + 2x 5 is $\frac{3.6}{2}$

- (72) The verbal expression from "x + 2" is ...X...increased by Z (73) The verbal expression from "y 5" is .X...decreased by 5
- (75) The verbal expression from "4 3n" is 4. minus 3 times n
- (77) The algebraic expression for "a number less than 7" is $\frac{1}{12}$
- (79) The algebraic expression for

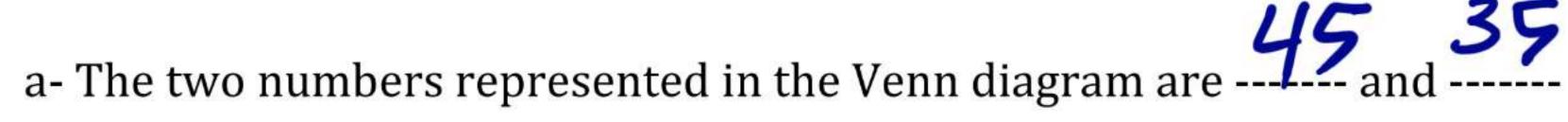
is .4.(.X+7) Four times the sum of a number and seven

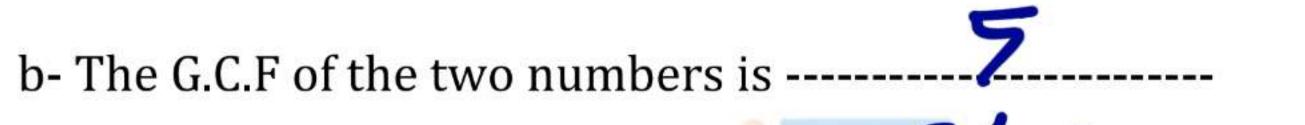
(80) The algebraic expression for

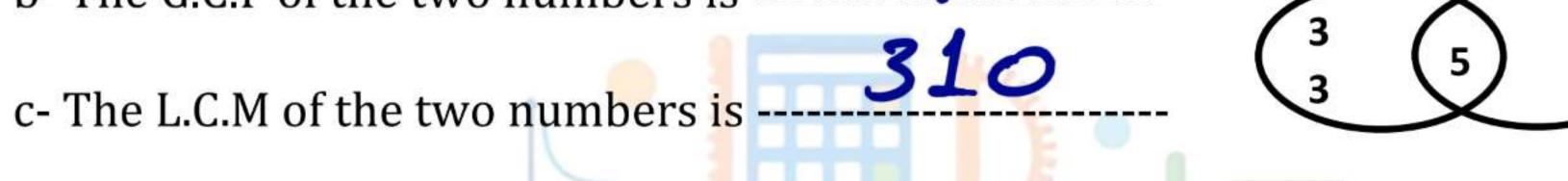
FNG. ESLAN ENAN

Answer the following questions

Using the following Venn diagram, complete

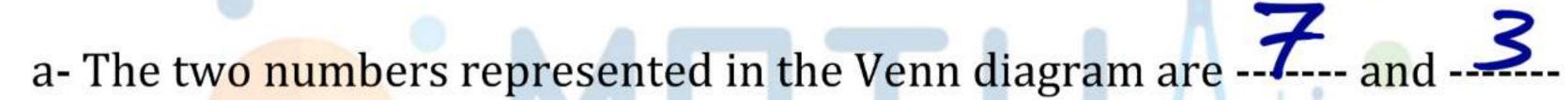


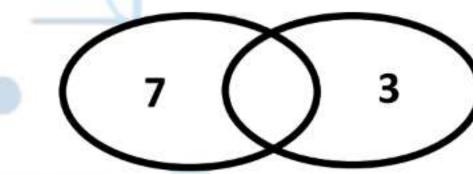






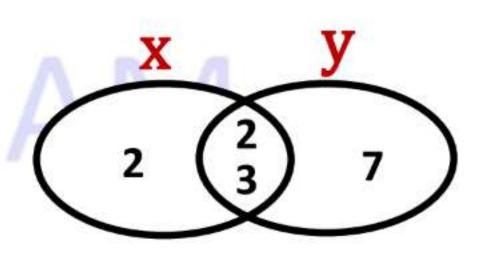
Using the following Venn diagram, complete





Using the following Venn diagram, complete

$$x = 12$$

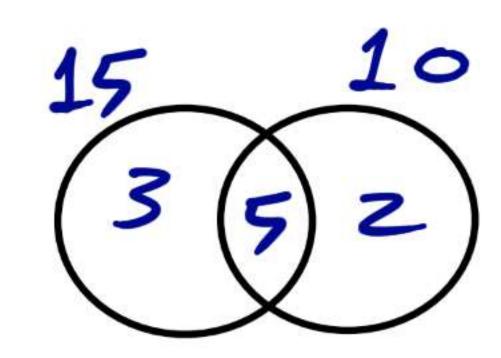


The GCF
$$= ...$$

The LCM =
$$...$$
8...4

The expression =
$$..6.(..2. + .7...)$$

Use Venn diagram to find G.C.F and L.C.M of: 15 and 10



$$15 = 3 \times 5$$
 $10 = 5 \times 2$



Order the given set of numbers from least to greatest.

$$2.1, 1.4, -3\frac{1}{4}, -1\frac{7}{8}, 2\frac{1}{2}$$

-346-1761.462.1625



- Ahmed has 10 L.E. in her money box, he will save 5 L.E. daily.
 - a- What algebraic expression represent this situation?



b- How much money in the money box after 3 days?

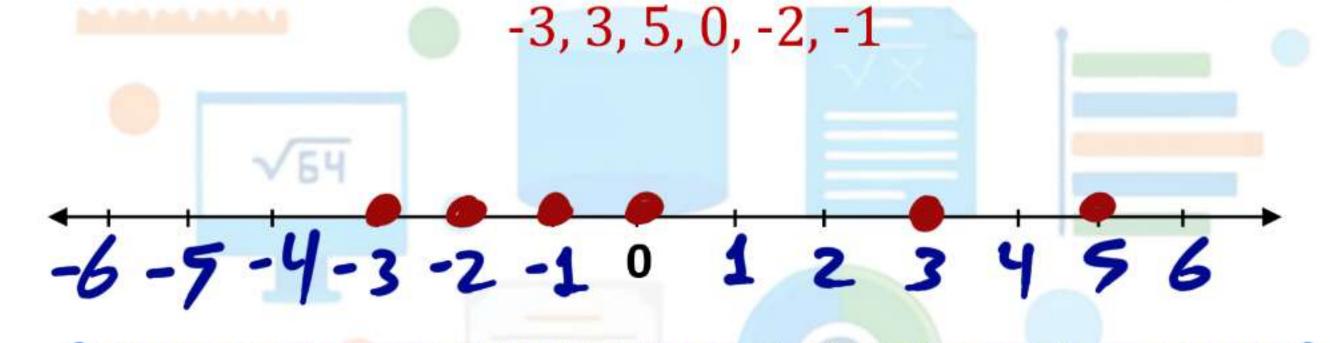
 $10 + 5x3 = 25 L \cdot E$

(7) Find two rational numbers lies between: $\frac{3}{4}$ and $\frac{4}{5}$

(8) Find two rational numbers lies between: -1.2 and -1.3

-1.20 6 - 1.30 -1.21 6 - 1.25

(9) Represent the numbers on the number line.



(10) A factory produces 1,645 pieces of cloth weekly.

How many pieces did the factory produce daily?

1645 - 7= 235 Pieces

.....





QUESTION 1 Choose the correct answer.

- 1 In the equation : 1,600 ÷ 25 = 64 the quotient is
 - **a** 1,600
- **b** 25
- **©** 64
- d zero

- 2 820 ÷ 24 = 34 R
 - **a** 9

6 8

© 7

d 4

- 3 5,262 ÷ 57 = 92 R
 - a 18
- **b** 57
- **9**2
- 0

- 4 3,548 ÷ 23 =R 6
 - **a** 154
- **b** 23
- **©** 514
- **d** 6

- 5 2525 ÷ 25 =
 - **a** 11
- **(b)** 101
- © 105 R 1
- **100 R 5**
- 6 Karma saves 455 L.E. weekly. How much did she save daily?
 - **a** 15
- **6**5
- 3185
- **d** 45
- 7 If the price of 15 same books is 3,645 L.E. , then the price of each one isL.E.
 - 234
- 243
- **324**
- **d** 423

- 8 2,574 ÷ 7 =
 - a 376 R 5
- **b** 367 R 5
- **367**
- **d** 376
- 9 In the opposite Venn diagram, the L.C.M is
 - **a** 0

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b 1

© 10

1 21

3 7

- ln the opposite Venn diagram, the G.C.F is
 - **a** 1

6

30

1 90

5 2 3





- 11 In the opposite Venn diagram, the G.C.F is
 - **a** 30

b 1

2

90

- **1** 6
- 12 In the opposite Venn diagram, the value of X is
 - **a** 5

10

- **6**
- **d** 30
- is a multiple of any number.
 - **a** 0

b 1

Q 2

(1) 3

5

- Which of the following are relatively prime numbers?.....
 - 3 and 9
- 6 and 8
- 5 and 7
- **14 and 15**
- 15 Which of the following are relatively prime numbers?.....
 - 8 and 9
- **b** 7 and 14
- © 5 and 10
- 2 and 3

- 16 20 + 25 =
 - (0 + 5)
- (5) 5 (2 + 5)
- **©** 5 (4 + 5)
- (0 + 5)

5

3

- 17 From the opposite Venn diagram the expression is
 - 10 (15 + 10)

(10 + 5)

© 5 (10 + 3)

(10)(3+5)

- 18 8 (3 + 5) =
 - a 24 + 13
- **(b)** 3 (8 + 5)
- 24 + 40
- 11 + 13

- $\frac{1}{4} + \frac{2}{4} + \frac{3}{4} + \frac{2}{4} = \dots$
 - **a** 2

b 1

 $\frac{7}{8}$

 $\frac{5}{8}$

- $\frac{5}{6} \frac{3}{4} = \dots$
 - $a \frac{1}{2}$
- $\frac{1}{12}$
- $\frac{1}{24}$

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- 21 The smallest number from the following is
 - **a** -51
- **b** -11
- **©** 52
- **d** -18

- 22 The opposite of -5 is
 - **a** -5
- **6** 5

0

10

- 23 The opposite of the opposite of 2 is
 - **a** -2
- (-2)
- 0

d 4

- 24 The integer which comes just next –1
 - **a** -2
- **6** 0

Q 1

1 2

- 25 The smallest natural number is
 - **a** -2
- **6** 0

- **O** -1
- **1**

- 26 The smallest counting number is
 - **a** -1
- $\frac{5}{5}$

- O.1
- $\frac{10}{5}$

- 27 The smallest non-negative integer is
 - **a** -2
- **(** -1
- **©** 0

d 1

- 28 The greatest negative integer is
 - **a** -2

Mötaal Mötaal Mötaal Mötaal Mötaal Mötaal

- **6** -1
- **O** 0

- **(1)** -(-1)
- 29 Which of the following numbers is an integer?.....
 - a $\frac{15}{6}$
- **b** 15
- \circ $\frac{15}{3}$
- $\frac{15}{2}$
- 30 Which of the following numbers is an integer?.....
 - a $\frac{5}{2}$
- $\frac{4}{8}$
- **©** 2.1
- $\frac{1}{100} \frac{25}{5}$
- 31 All the following numbers are rational except
 - **a** 0

- $\frac{3}{7-7}$
- © <u>5-5</u>
- $\frac{1}{5-3}$

- The number –1.2 in the form $\frac{a}{b}$ is _____
 - **a** $-\frac{1}{2}$
- $\frac{1}{1}$
- $\frac{12}{10}$
- $\frac{1}{10}$ 2 $\frac{1}{10}$





- 33 The number $2\frac{1}{4}$ in the form $\frac{a}{b}$ is _____
 - $a \frac{4}{9}$
- $\frac{1}{6} \frac{9}{4}$
- \circ $\frac{7}{4}$
- $\frac{1}{4}$

- 34is lying between 3.14 and 3.2
 - a 3.15
- **b** 3.21
- **3.20**
- **d** 3.22
- The number of rational numbers lying between $\frac{1}{4}$ and $-\frac{1}{4}$ is ______
 - a 0

b 1

Q 2

an infinite numer

- 36 The opposite of zero is
 - **a** -1
- **6** 0

Q 1

d has no opposite

- The additive inverse of $-\left|-\frac{1}{2}\right|$ is
 - a $-\frac{1}{2}$
- **b** 0
- $0\frac{1}{2}$

(1) - 0.2

- 38 If | x | = 7 , then x =
 - **a** 7

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- **6** 7
- 3 7 or 7
- otherwise

- 39 If | −11 | = x , then x =
 - **a** -11
- **(b)** 11
- **C** 1

d - 1

- $40 \left| -2\frac{1}{4} \right| \div \left| \frac{1}{2} \right|$ is
 - a $4\frac{1}{2}$
- **b** 4

- $\bigcirc 4\frac{1}{4}$
- $\frac{0}{8}$

- $41 |4| |-2\frac{1}{3}|$ is
 - **a** 2

- $\frac{1}{3}$
- \circ 6 $\frac{1}{3}$
- $1\frac{2}{3}$
- 42 Set of integers subset of set ofnumbers
 - a counting
- **b** natural
- prime
- rational

- 43 The number 2.024 belongs tonumbers
 - a counting
- **b** natural
- c integer
- rational





- 44 The number of terms of the expression: 5 m 2 m + 7 is
 - **a** 1
- **b** 2
- **C** 4

- **d** 7
- 45 In the algebraic expression : 5 x 4 + 5 y + 5 , the two like terms are
 - a 5 and 5 v
- **b** -5 x and 5 y **c** -4 and 5
- **1** -5 x and 5

- 46 Which of the following are like terms?.....
 - **a** 25,52
- **b** ab , bc
- c ab, aq
- **d** m, n
- - a 7 y
- **6** 7

- **C** y 1
- 48 The coefficient in the algebraic expression: 2 3 m + 1 is
 - **a** 2

b 3

O 1

- **1** -3
- 49 The coefficients in the algebraic expression: 2 5 m y are
 - a 5 and 1
- **b** 5 and 1
- **c** 5 and 1
- **1** 2 and 5
- 50 The constants in the algebraic expression: 3 y 2 + 3 y + 1 are
 - **a** 3, 3
- **(b)** 3, 2
- **C** 1, 2
- **d** 3, 1

- 51 Twelve less than three groups of y.
 - 12 3 y

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- **(b)** 3 y 12
- **C** y 3 (12)
- **12 (3) y**

- 52 Subtracting three times a number from two.
 - a 3r-2
- **b** 2-3r
- **©** 3 (2 r)
- **1** 3 (r 2)

- 53 Twice a number more than 8.
 - a 2x + 8
- (b) 2 (8 + x)
- **3** 8 + x
- **1** 2x-8
- 54 The best subset of the number 0 is numbers.
 - a counting
- natural
- integer
- rational
- 55 The distance between 3 and its opposite on the number line is unit(s)

5

a 3

6 0

G 6

d 12





Draft

QUESTION 2 Complete.

- 1 The L.C.M of 3 and 5 is
- 2 The L.C.M of 6 and 12 is
- 3 The G.C.F of 15 and 30 is
- 4 The common factor of all numbers is
- 5 The common multiple of all numbers is
- 6 6 (3 + 5) = 18 +
- 7 5 × 3 + 5 × 7 = 5 (.....+)
- In the opposite Venn diagram, the L.C.M is, and the G.C.F is
- $9 7\frac{1}{5} + 1\frac{2}{3} = \dots$

$$9\frac{1}{6} - \frac{2}{3} = \dots$$

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11
$$3 - \left| -1\frac{2}{5} \right| = \dots$$

$$|2 |2 | = |1 | = |1 |$$

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October Revision





- 17 The smallest natural number is
- 18 The greatest non-positive integer is
- 19 The additive inverse of $\left| -2\frac{2}{5} \right|$ is _____
- 20 The opposite of (- 1) is
- 21 The opposite to zero is
- 22 The number of integers between -2 and 3 is _____
- 23 15 with "belongs" or "dose not belong"
- 24 Write the correct sign "< , = or >"
 - a -3 --- -10
 - **b** -100 --- 0

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- **c** (- 2) | 2 |
- $\frac{1}{2}$ $\frac{2}{5}$ $\frac{7}{5}$
- 25 If | x | = 1 then x = or
- 26 If | x | = 3.03 then x = or
- 27 If | 3 | = x , then x =
- 28 If | 5.3 | = x , then x =
- 29 The sum of twice a number and 7 is
- 30 The verbal expression for "2y 2" is ______

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QUESTION 3 Essay questions.

- From the opposite Venn diagram, complete:
 - a The value of x is
- **G.C.F** is
- (

- **b** The value of y is
- d L.C.M is
- 2 From the opposite Venn diagram, complete:
 - a The value of x is
- **G.C.F** is
- **1** The value of y is
- d L.C.M is
- The prime factors of x factors of 50
- 3 Use the Venn diagram to find: G.C.F and L.C.M of 35 and 42
- A factory produces 875 pieces of cloth weekly. How many pieces did the factory produce daily?

- A merchant paid 2,000 L.E. to buy 16 boxes of mango. Find the price of each box and if each box contains 5 kg of mango , find the price of each kg.
- Samir ate $\frac{1}{4}$ of the cake and Seif ate $\frac{1}{3}$ of the same cake. How much of the cake has been eaten?

8

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- 7 Arrange the following from least to greatest.
 - **a** 5 , 0 , 4 , 4 , 9 , 3
 - **b** 5, 0, $-\frac{7}{2}$, $\frac{5}{2}$, -9, $-2\frac{1}{4}$
- 8 Arrange the following from greatest to least.
 - (a) $-\frac{7}{12}$, $-\frac{7}{2}$, $2\frac{1}{2}$, zero, $\frac{3}{4}$
 - **b** $\frac{3}{5}$, $-\frac{7}{10}$, $-\frac{5}{4}$, 0.4, zero
- 9 Find three rational numbers lies between :
 - a $\frac{3}{4}$ and $\frac{4}{5}$

b 3.2 and 3.23

10 Write the algebraic expression which represents:

Ahmed is x years old now, how old will he be after 6 years?

With My Best Wishes 3

Model Answer



QUESTION 1 Choose the correct answer.

- 1) c
- 12) d
- 23) a
- 34) a
- 45) c

- 2) d
- 13) b
- 24) b
- 35) d
- 46) a

- 3) a
- 14) d
- 25) b
- 36) b
- 47) b

48) d

- 4) a
- 15) a
 16) c
- 27) c

26) b

- 37) c
 38) c
- 49) c

- 5) b
- 17) d
- 28) b
- 39) b
- 50) c

7) b

6) b

- 18) c
- 29) c
- 40) a
- 51) b

- 8) b
- 19) a
- 30) d

31) b

- 41) d 42) d
- 53) a

52) b

- 9) d 10) a
- 20) c
 21) a
- 32) c
- 43) d
- 54) b

- 11) d
- 22) b
- 33) b
- 44) c
- 55) c

QUESTION 2 Complete.

1) 15

7)3+7

2) 12

8) 100, 10

3) 15

9) $8\frac{13}{15}$

4) 1

10) 8 1

5) ₀

11) $\frac{8}{5} = 1 \frac{3}{5}$

6) 30

12) <mark>2</mark>

Model Answer



13) 25 R 6

22) 4

14) 101

23) = 5 belongs

15) 81

(24) a) > (b) < (c) > (d) =

16) 8

25) -1 or 1

17) <mark>0</mark>

26) -3.03 or 3.03

18) <mark>0</mark>

27) 3

19) -2 <u>2</u> 5

28) **5.3**

20) -1

29) 2 x + 7

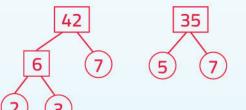
21) 0

Twice a number y decreased by 2 30) (The answer may vary)

QUESTION 3 Essay questions.

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- 1) a) x = 100, b) y = 30,
- c) G.C.F = $2 \times 5 = 10$,
- d) L.C.M = $2 \times 5 \times 2 \times 5 \times 3 = 300$
- 2) a) x = 12, b) y = 5,
- c) G.C.F = 2,
- d) L.C.M = $2 \times 2 \times 5 \times 5 \times 3 = 300$
- 3)



- 5 3
- G.C.F = 7

L.C.M = $2 \times 3 \times 7 \times 5 = 210$

Model Answer





4) The number of pieces = $875 \div 7 = 125$ pieces

- 5) The price of each box = $2000 \div 16 = 125$ L.E. The price of each kg. of mango = $125 \div 5 = 25$ L.E.
- 6) What left of the cake is :1 $\frac{1}{4}$ $\frac{1}{3}$ = $\frac{5}{12}$ of the cake.
- 7) a) The order is: -9, -5, -4, 0, 3, 4b) The order is: -9, $-\frac{7}{2}$, $-2\frac{1}{4}$, 0, 5
- 8) a) The order is: $2\frac{1}{2}$, $\frac{3}{4}$, zero, $-\frac{7}{12}$, $-\frac{7}{2}$ b) The order is: $\frac{3}{5}$, 0.4, zero, $-\frac{7}{10}$, $-\frac{5}{4}$
- 9) a) $\frac{3 \times 5}{4 \times 5} = \frac{15}{20} = \frac{150}{200}$, $\frac{4 \times 4}{5 \times 4} = \frac{16}{20} = \frac{160}{200}$ So; $\frac{151}{200}$, $\frac{152}{200}$, $\frac{153}{200}$ are between $\frac{3}{4}$ and $\frac{4}{5}$

(The answers may vary)

- b) 3.200 , 3.230 So; 3.201 , 3.202 , 3.203 are between 3.2 and 3.23 (The answers may vary)
- 10) He will be: x + 6 years old

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Q1) Choose the correct answer:

1-	Divide	8100	by 25.	the quotient is
-		CICO	\sim , $-\sim$,	, 1110 0 0 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1

a) 300

b) 324

c) 325

a) 2

b) 3

c) 6

a) 48

b) 192

c) 32

a) 0

b) 1

c) 2

a) 0

b) 1

c) 2

a) 21

b) 36

c) 28

a) 0

b) 6

c) -6

a) 0

b) 14

c) -14







- a) Counting
- b) Natural c) Integers

10- Positive numbers & zero are numbers

- a) Counting b) Natural
- c) Integers

11- Positive numbers, zero, and negative numbers are numbers

- a) Counting
- b) Natural
- c) Integers

12- Integer numbers contain decimals and fractions.

a) True

b) False

13- A class of 27 students has 15 girls. What is the ratio of girls to boys?

- a) 4:5
- b) 5:4

c) 12

14- Which of the following relatively prime number

- a) 4 and 8
- b) 12 and 18
- c) 9 and 4

15- 20 +25 =.....

- a) 2 (0+5) b) 5 (5+5)
- c) 5 (4+5)

16- | -5 | =

b)-5

c) 0





a) -3

b)1

c) 0

18- The greatest negative integer is

a) -11

b)-7

c) -2

19- The number -2.5 in the form of $\frac{a}{b}$ is

a) $-\frac{25}{100}$

b)- $\frac{25}{10}$

c) $-2\frac{25}{100}$

20- The rational number between -3.6 and -3.7 is

a) -3.71

b)-3.62

c) -3.59

21- The opposite of $\left| -\frac{1}{3} \right|$ is

a) $\frac{1}{3}$

b) - $\frac{1}{3}$

c) 1

21- The coefficient in the expression 8v + 2 is

a) 2

b)8v

c) 8

22- Twice the sum of a number and 6 is

a)
$$2x + 6$$

a)
$$2x + 6$$
 b) $2(x+6)$

c)
$$2(x-6)$$

Q2) Complete your answer:

$$1-3\frac{2}{5}+4\frac{3}{7}=\dots$$

$$2-6 \, \frac{4}{5} - 3 \, \frac{9}{10} = \dots$$

- 4-The following ratio 8:10 in the simplest form
- 5-The divisor of the equation $16,692 \div 53 = 321$

$$7-3 \times (2+5) = \dots \times \dots + \dots \times \dots \times \dots$$

- 8-In the opposite Venn diagram, The GCF is...... , And the LCM is
- 9-The dividend in this equation: 16,692 divided by 52 = 321 is



$$11- \quad |-15| \div |3| = \dots$$

- 14- The smallest non negative integer is
- 15- The rational number between $\frac{1}{4}$ and $\frac{1}{5}$ is

16- If
$$| \vec{x} | = 5$$
, then $x = \dots$ or

- 17- The smallest counting number is
- 18- The smallest natural number is
- 19- Set of natural numbers is set of counting numbers.
- 20- Set of counting numbers is set of rational numbers.
- 21- $\frac{1}{4}$ is to set of integers.





Q3) Compare The following:

$$0 \quad \begin{bmatrix} --- \\ -- \end{bmatrix} - \frac{1}{2}$$

$$-\frac{19}{5}$$
 $\begin{bmatrix} --- \\ --- \end{bmatrix}$ $-3\frac{4}{5}$

$$\frac{1}{3}\begin{bmatrix} --- \\ -- \end{bmatrix}$$

$$\frac{11}{3}$$

<u>Q4)</u> Represent the following numbers in the number line then arrange them from greatest to smallest:

$$4, \frac{9}{2}, -\frac{5}{2}, -5, 4\frac{1}{2}, 0, 1\frac{3}{4}$$

• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •

Q5) Story problems:

<u>1-</u> Hossam paid 3,492 L.E. to	buy 36 boxes of
chocolate. Find the price of	f each box.
	TANA MARKATAN
	WHATTOEN

2- Sara studies x hours daily, write an algebraic
expression for the number of studied hours in a week.
<u>3-</u> Ola is giving her friends pencils and special erasers.
The store sells pencils in boxes of 8 and erasers in
boxes of 10. If Ola wants the same number of each,
what is the minimum number of pencils that she will
have to buy?
4- If the ticket of entering a car park is 25 L.E. and
10L.E. for each hour you spend.
a) Write an algebraic expression to represent the relation
between total cost and the number of hours.
b) What is the cost of spending 8 hours in the park?
o) what is the cost of spending o hours in the park!
•••••••••••••••••••••••••••••••

